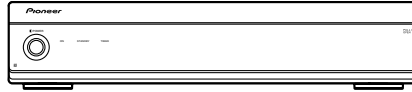


Service Manual



PDP-R05E

ORDER NO.
ARP3225

MEDIA RECEIVER

PDP-R05E

PDP-R05XE

PDP-R05FE

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
PDP-R05E	WYVI	AC220-240V	
PDP-R05E	WYVIXK	AC220-240V	
PDP-R05XE	WYVIXK	AC220-240V	
PDP-R05FE	WYVI	AC220-240V	
PDP-R05FE	WYVIXK	AC220-240V	

Please connect it to the PLASMA DISPLAY PDP-505PE or PDP-435PE for adjustment and operation inspection.



For details, refer to "Important Check Points for Good Servicing".

Confirm it


Serial No.

○ ○ **WYVI** : □ □ **SS** ##### △ △
○ ○ **WYVIXK** : □ □ **UK** ##### △ △

1234

SAFETY INFORMATION

A



This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

B

WARNING



This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

C



NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

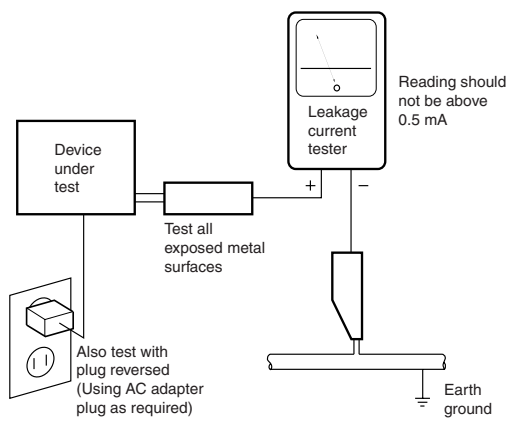
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification (addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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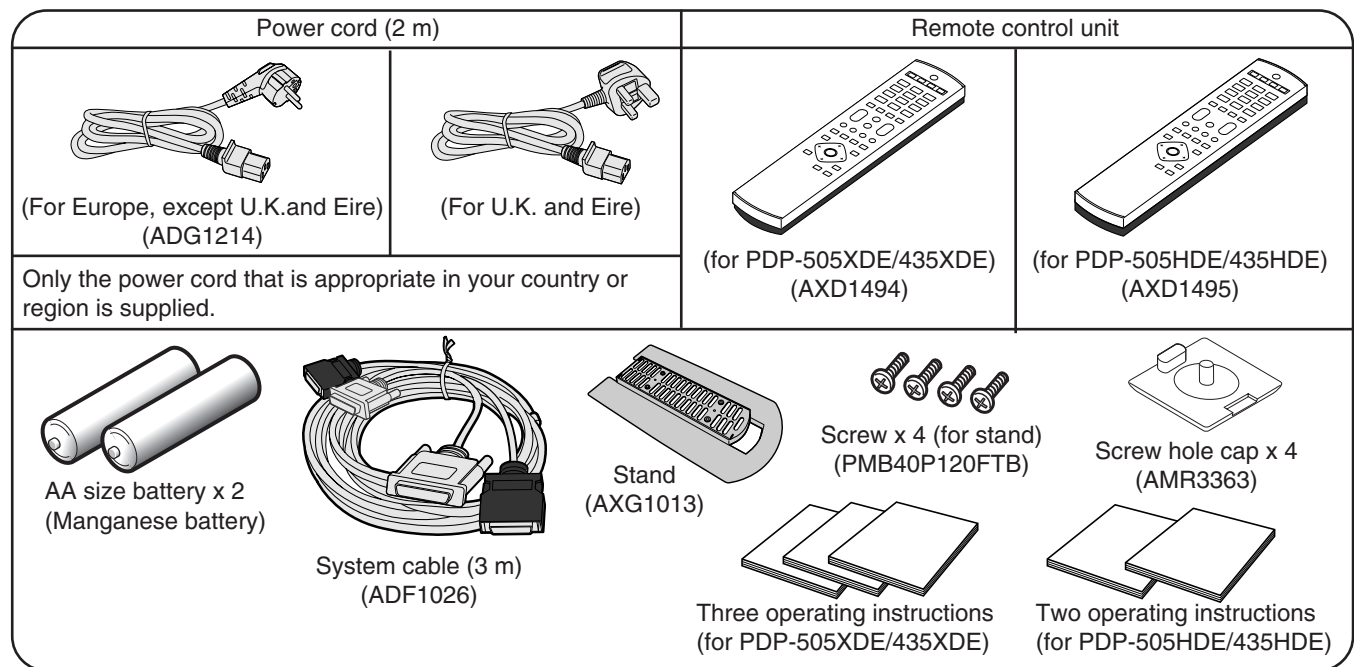
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1. SPECIFICATIONS

Item			Media Receiver, Model:PDP-R05XE	Media Receiver, Model:PDP-R05E	
Colour System		Analogue	PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60		
		Digital	PAL/SECAM	Not Applicable	
TV Function (Analogue)	Receiving System		B/G,D/K,I,L/L ’		
	Tuner	VHF/UHF	E2 –E69ch,F2 –F10ch,I21 –I69ch,IR A –IR Jch		
		CATV	Hyper-band,S1 –S41ch		
	Auto Channel Preset		99 ch,Auto Preset,Auto Label,Auto Sort		
	STEREO		NICAM/A2		
TV Function (Digital)	Receiving System		DVB-T (2K/8K COFDM)		
	Tuner	VHF/UHF	VHF Band III (170 to 230 MHz)and UHF Band IV,V (470 to 862 MHz)	Not Applicable	
			Auto Channel Preset		999 ch,Auto Preset,Auto Label,Auto Sort
	STEREO		MPEG layer I/II,Dolby Digital		
Terminals	Rear	INPUT 1	SCART (AV in,RGB in,TV out)		
		INPUT 2	SCART (AV in/out,S-VIDEO in,AV link *1)Component Video		
		INPUT 3	SCART (AV in/out,S-VIDEO in,RGB in,AV link *1),HDMI in		
		Antenna	75 Ω Din Type for VHF/UHF in (Analogue)		
			75 Ω Din Type for VHF/UHF in (Digital)		Not Applicable
			75 Ω Din Type for VHF/UHF out (Digital)		Not Applicable
	Front	INPUT 4	S-VIDEO,AV in		
		PC	Analogue RGB in,Audio in		
		PC CARD	PCMCIA Type II		
MONITOR OUTPUT Terminal(Rear)			S-VIDEO out,AV out		
SUB WOOFER OUTPUT Terminal (Rear)			Variable		
PHONES OUTPUT Terminal (Front)			16 –32 Ω recommended		
DIGITAL OUT Terminal			Digital audio output (Optical)	Not Applicable	
COMMON INTERFACE (Rear)			CA Module	Not Applicable	
Power Requirement			220 –240 V AC ,50/60 Hz,41 W (1.2 W Standby:Aerial Power Off)	220 –240 V AC ,50/60 Hz,35 W (0.4 W Standby)	
Dimensions			420 (W) x 90 (H) x 295 (D)mm		
Weight			5.6 kg	4.9 kg	

* 1 Switchable

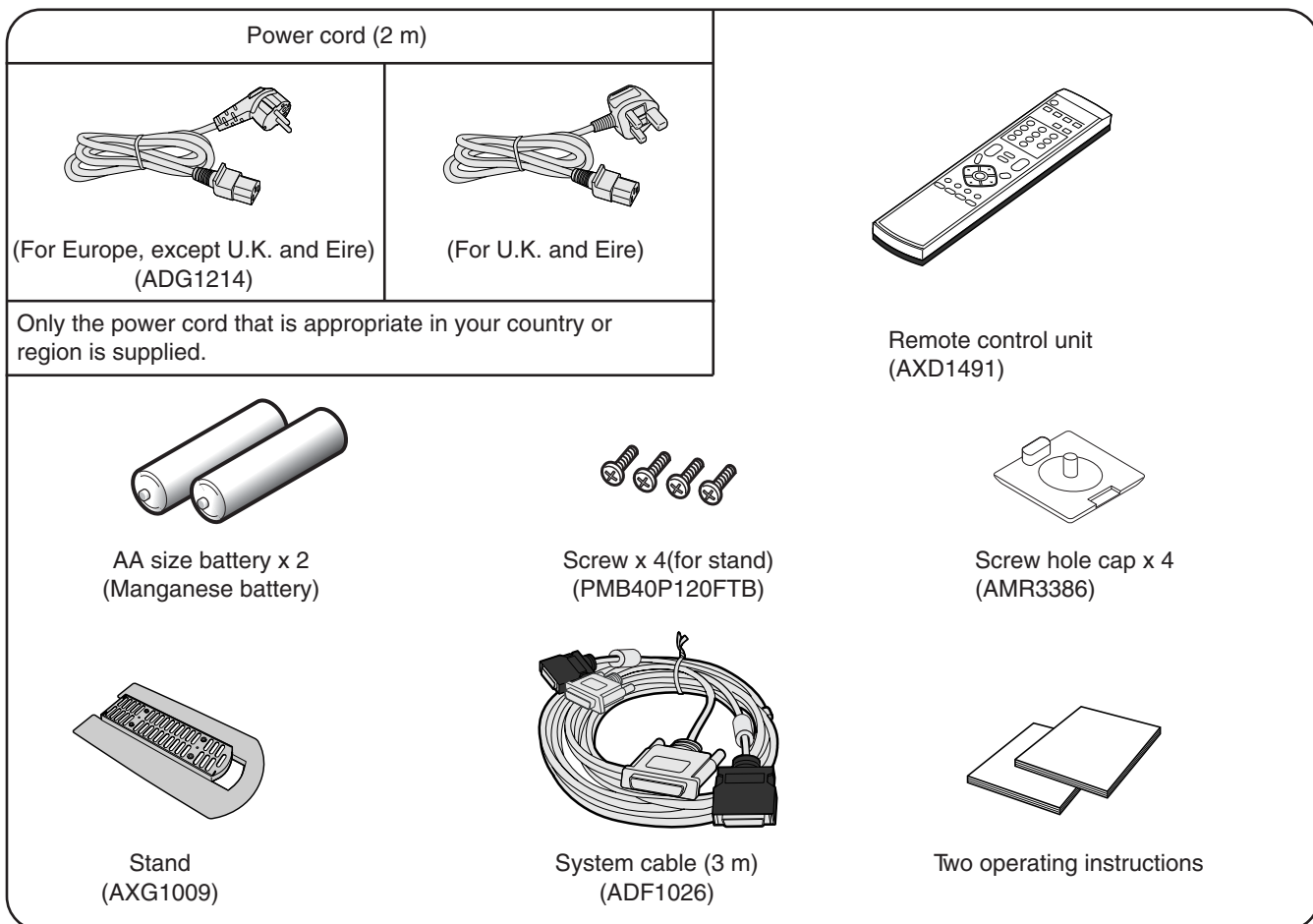
• Design and specifications are subject to change without notice.



Item			Media Receiver, Model:PDP-R05FE
Colour System			PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60
TV Function	Receiving System		B/G,D/K,I,L/L'
	Tuner	VHF/UHF	E2 –E69ch,F2 –F10ch,I21 –I69ch,IR A –IR Jch
		CATV	Hyper-band,S1 –S41ch
	Auto Channel Preset		99 ch,Auto Preset,Auto Label,Auto Sort
	STEREO		NICAM/A2
Terminals	Rear	INPUT 1	SCART (AV in,RGB in,TV out)
		INPUT 2	SCART (AV in/out,S-VIDEO in,AV link *1)Component Video
		INPUT 3	SCART (AV in/out,S-VIDEO in,RGB in,AV link *1),HDMI in
		Antenna	75 Ω Din Type for VHF/UHF in
	Front	INPUT 4	S-VIDEO,AV in
MONITOR OUTPUT Terminal (Rear)			S-VIDEO out,AV out
Power Requirement			220 –240 V AC ,50/60 Hz,27 W (0.4 W Standby)
Dimensions			420 (W) x 90 (H) x 295 (D)mm
Weight			4.8 kg


*1 Switchable

• Design and specifications are subject to change without notice.



2. EXPLODED VIEWS AND PARTS LIST

NOTES: ● Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

● The  mark found on some component parts indicates the importance of the safety factor of the part.

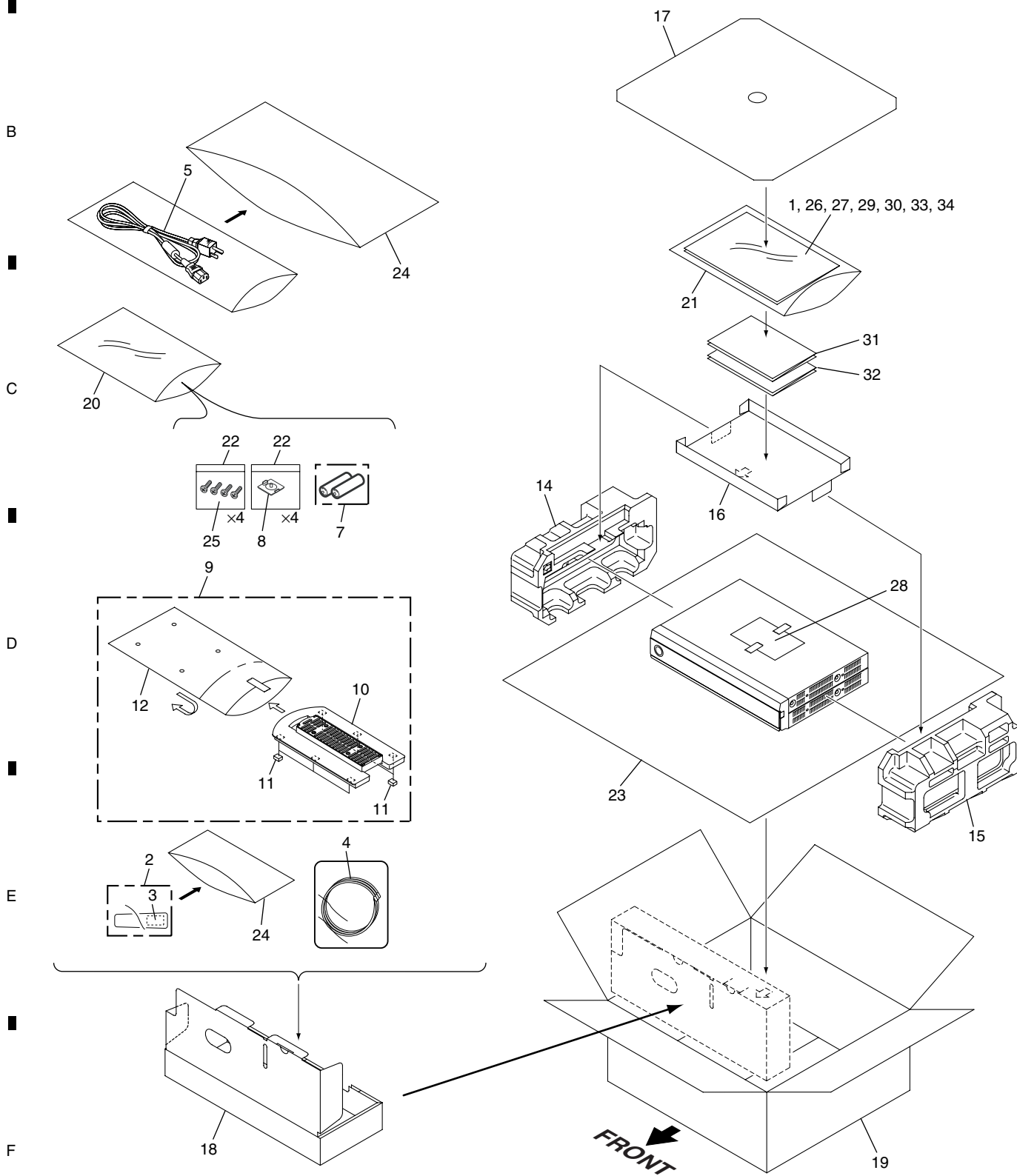
Therefore, when replacing, be sure to use parts of identical designation.

● Screws adjacent to ▼ mark on product are used for disassembly.

● For the applying amount of lubricants or glue, follow the instructions in this manual.

(In the case of no amount instructions, apply as you think it appropriate.)

2.1 PACKING SECTION



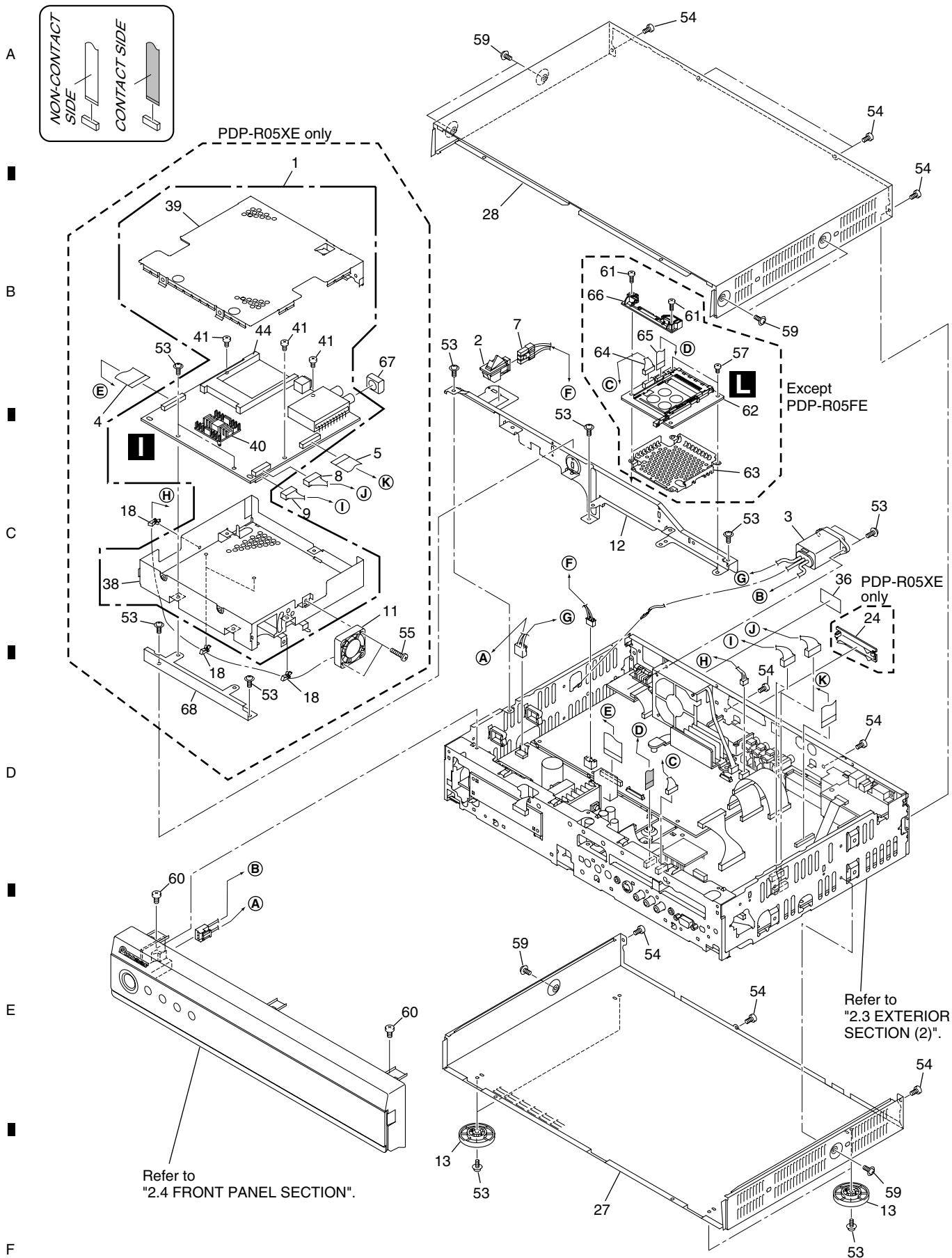
Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Operating Instructions	See Contrast table (2)	19	Carton	See Contrast table (2)
2	Remote Control Unit	See Contrast table (2)	NSP 20	Literature Bag	AHG1303
3	Battery Cover	See Contrast table (2)	21	Vinyl Bag	AHG1340
4	System Cable (3m)	ADF1026	22	Vinyl Bag	AHG1337
△ 5	Power Cord	ADG1214	23	Laminated Sheet	AHG1350
6	•••••		24	Air Capsule Bag	AHG1351
NSP 7	Dry Cell Battery (R6/AA)	VEM1031	25	Screw	PMB40P120FTB
8	Screw Hole Cap	See Contrast table (2)	26	Operating Instructions	See Contrast table (2)
9	Stand Assy	See Contrast table (2)	27	Caution Card	ARM1223
NSP 10	Stand	See Contrast table (2)	28	Caution Card	ARM1234
NSP 11	Stand Cushion	AEB1390	29	Operating Instructions	See Contrast table (2)
12	Laminated Sheet Bag	AHG1334	30	Errata	See Contrast table (2)
13	•••••		31	User Card A	See Contrast table (2)
14	Pad L	See Contrast table (2)	32	User Card B	See Contrast table (2)
15	Pad R	See Contrast table (2)	33	Caution Manual	See Contrast table (2)
16	IM Pad	See Contrast table (2)	NSP 34	Block Diagram	See Contrast table (2)
17	Top Pad	See Contrast table (2)			
18	Accessory Box	See Contrast table (2)			

(2) CONTRAST TABLE




PDP-R05E/WYVI, /WYVIXK, PDP-R05XE/WYVIXK, PDP-R05FE/WYVI and / WYVIXK are constructed the same except for the following:

Mark	No.	Description	PDP-R05E/ WYVI	PDP-R05E/ WYVIXK	PDP-R05XE/ WYVIXK	PDP-R05FE/ WYVI	PDP-R05FE/ WYVIXK
NSP	1	Operating Instructions (English/French/German)	ARE1391	ARE1380	ARE1380	ARE1392	ARE1383
	2	Remote Control Unit	AXD1495	AXD1495	AXD1494	AXD1491	AXD1491
	3	Battery Cover	AZN7919	AZN7919	AZN7919	AZA7424	AZA7424
	8	Screw Hole Cap	AMR3363	AMR3363	AMR3363	Not used	Not used
	8	Screw Hole Cap UE	Not used	Not used	Not used	AMR3386	AMR3386
	9	Stand Assy	AXG1013	AXG1013	AXG1013	Not used	Not used
	9	Stand Assy UE	Not used	Not used	Not used	AXG1009	AXG1009
	10	Stand	AMR3352	AMR3352	AMR3352	Not used	Not used
	10	Stand UE	Not used	Not used	Not used	AMR3382	AMR3382
	14	Pad L	AHA2370	AHA2396	AHA2396	AHA2370	AHA2396
	15	Pad R	AHA2371	AHA2397	AHA2397	AHA2371	AHA2397
	16	IM Pad	AHB1253	AHB1259	AHB1259	AHB1253	AHB1259
	17	Top Pad	AHB1256	AHB1260	AHB1260	AHB1256	AHB1260
	18	Accessory Box	AHC1053	AHC1056	AHC1056	AHC1053	AHC1056
	19	Carton E	AHD3247	AHD3293	Not used	Not used	Not used
	19	Carton XE	Not used	Not used	AHD3246	Not used	Not used
	19	Carton FE	Not used	Not used	Not used	AHD3248	AHD3283
	26	Operating Instructions (Italian/Dutch/Swedish/Spanish)	ARC1541	ARC1533	ARC1533	Not used	Not used
NSP	26	Operating Instructions (Italian/Dutch/Spanish)	Not used	Not used	Not used	ARC1542	ARC1535
	29	Operating Instructions (English/French/German) (Italian/Dutch/Swedish/Spanish)	Not used	Not used	ARE1390	Not used	Not used
	30	Errata	ARX1120	ARX1121	ARX1121	ARX1120	ARX1121
	31	User Card A	Not used	ARY1150	ARY1150	Not used	ARY1150
	32	User Card B	Not used	ARY1151	ARY1151	Not used	ARY1151
	33	Caution Manual	ARM1263	ARM1264	ARM1264	ARM1263	ARM1264
	34	Block Diagram	Not used	ARY1159	ARY1159	Not used	ARY1159

2.2 EXTERIOR SECTION (1)



EXTERIOR SECTION (1) PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	TUNER BOARD Assy	See Contrast table (2)	50	•••••	
 2	Power Switch (TRAP)(S1)	ASG1089			A
 3	AC Inlet (CN1)	AKP1257	51	•••••	
4	Flexible Cable (J209)	See Contrast table (2)	52	•••••	
5	Flexible Cable (J210)	See Contrast table (2)	53	Screw	ABZ30P080FTC
			54	Screw	BBZ30P060FTB
			55	Screw	See Contrast table (2)
6	•••••				
7	3P Housing Wire (J107)	ADX2836			
8	9P Housing Wire (J113)	See Contrast table (2)	56	•••••	
9	8P Housing Wire (J114)	See Contrast table (2)	57	Screw	ABZ30P080FTC
10	•••••		58	•••••	
			59	Screw	See Contrast table (2)
 11	Fan Motor 42 x 10.5L	See Contrast table (2)	60	Screw	ABZ30P060FTB
12	Center Stay U	ANG2564			B
13	Leg Assy	AXG1012	61	Screw	See Contrast table (2)
14	•••••		62	PC Card Module	See Contrast table (2)
15	•••••		63	PC Shield	See Contrast table (2)
			64	6P Housing Wire (J111)	See Contrast table (2)
			65	Flexible Cable (J208)	See Contrast table (2)
16	•••••				
17	•••••				
18	Side Type Mini Clamp	See Contrast table (2)	66	PC Guide	See Contrast table (2)
19	•••••		67	Gasket XE	See Contrast table (2)
20	•••••		68	Tuner Adaptor	See Contrast table (2)
					C
21	•••••				
22	•••••				
23	•••••				
24	Rear Cover	AMR3425			
25	•••••				
26	•••••				
27	Metal Bonnet Bottom	See Contrast table (2)			
28	Metal Bonnet Top	See Contrast table (2)			
29	Serial Sheet	AAX2609			D
30	•••••				
31	•••••				
32	•••••				
33	•••••				
34	•••••				
35	•••••				
NSP 36	Serial Label	ARW1100			
37	•••••				
NSP 38	Bottom Can	See Contrast table (2)			E
39	Top Can	See Contrast table (2)			
40	Heat Sink	See Contrast table (2)			
41	Screw	See Contrast table (2)			
42	Screw	See Contrast table (2)			
43	•••••				
44	PCMCIA Ejector	See Contrast table (2)			
45	•••••				
46	•••••				
47	•••••				F
48	•••••				
49	•••••				

(2) CONTRAST TABLE

PDP-R05E/WYVI, /WYVIXK, PDP-R05XE/WYVIXK, PDP-R05FE/WYVI and / WYVIXK are constructed the same except for the following:

Mark	No.	Description	PDP-R05E/ WYVI	PDP-R05E/ WYVIXK	PDP-R05XE/ WYVIXK	PDP-R05FE/ WYVI	PDP-R05FE/ WYVIXK
A	1	TUNER BOARD Assy	Not used	Not used	AWE1301	Not used	Not used
	4	Flexible Cable (J209)	Not used	Not used	ADD1280	Not used	Not used
	5	Flexible Cable (J210)	Not used	Not used	ADD1267	Not used	Not used
	8	9P Housing Wire (J113)	Not used	Not used	ADX3017	Not used	Not used
	9	8P Housing Wire (J114)	Not used	Not used	ADX3018	Not used	Not used
	⚠						
	11	Fan Motor 42 x 10.5L)	Not used	Not used	AXM1049	Not used	Not used
	18	Side Type Mini Clamp	Not used	Not used	AEC2003	Not used	Not used
	24	Rear Cover	Not used	Not used	AMR3425	Not used	Not used
	27	Metal Bonnet Bottom	ANE1631	ANE1631	ANE1631	Not used	Not used
B	27	Metal Bonnet Bottom (UE)	Not used	Not used	Not used	ANE1634	ANE1634
	28	Bonnet Top	ANE1632	ANE1632	ANE1632	Not used	Not used
	28	Bonnet Top (FE)	Not used	Not used	Not used	ANE1637	ANE1637
	38	Bottom Can	Not used	Not used	XNA1004	Not used	Not used
	39	Top Can	Not used	Not used	XNG1001	Not used	Not used
	40	Heat Sink	Not used	Not used	XNH1004	Not used	Not used
	41	Screw	Not used	Not used	BBZ30P060FTB	Not used	Not used
	42	Screw	Not used	Not used	PMZ20P100FNI	Not used	Not used
C	44	PCMCIA Ejector	Not used	Not used	ANG2673	Not used	Not used
	55	Screw	Not used	Not used	BBZ30P140FTC	Not used	Not used
	59	Screw	ABZ30P080FTC	ABZ30P080FTC	ABZ30P080FTC	ABZ30P060FTB	ABZ30P060FTB
	61	Screw	ABZ30P180FTC	ABZ30P160FTC	ABZ30P160FTC	Not used	Not used
	62	PC Card Module	AXY1073	AXY1073	AXY1073	Not used	Not used
	63	PC Shield	ANG2578	ANG2578	ANG2578	Not used	Not used
	64	6P Housing Wire (J111)	ADX3016	ADX3016	ADX3016	Not used	Not used
	65	Flexible Cable (J208)	ADD1226	ADD1226	ADD1226	Not used	Not used
D	66	PC Guide	AMR3393	AMR3393	AMR3393	Not used	Not used
	67	Gasket XE	Not used	Not used	ANK1756	Not used	Not used
	68	Tuner Adaptor	Not used	Not used	ANG2672	Not used	Not used

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EXTERIOR SECTION (2) PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.	
1	MR MAIN BOARD Assy	See Contrast table (2)	31	Barrier A	AEC2017	
2	AV BOARD Assy	See Contrast table (2)	32	Re-use Wire Saddle	AEC1945	A
3	MDR Assy	AWZ6948	33	Edge Saddle	AEC1946	
4	SR Assy	See Contrast table (2)	34	Mini Card Spacer	AEC1959	
5	FRONT Assy	See Contrast table (2)	35	Circuit Board Spacer	AEC1964	
6	LED Assy	See Contrast table (2)	36	Gasket F	ANK1722	
7	•••••		37	Card Spacer A	BEC1120	
⚠ 8	POWER SUPPLY Unit	AXY1091	38	Flexible Cable (J202)	ADD1209	
9	Flexible Cable (J201)	ADD1209	39	•••••		
10	Flexible Cable (J203)	ADD1210	40	Hexagon Head Screw	BBA1051	
11	Flexible Cable (J206)	ADD1213	41	Screw	ABZ30P060FTB	B
12	Flexible Cable (J207)	ADD1214	42	Screw	ABZ30P080FTC	
13	15P Housing Wire (J105)	ADX2833	43	Screw	BBZ30P060FTB	
14	7P Housing Wire (J109)	ADX3015	44	Screw	BPZ30P100FTB	
15	16P Housing Wire (J112)	ADX2917	45	Screw	PMZ26P060FTB	
⚠ 16	Fan Motor 60 x 25L	AXM1045	46	Screw	BMZ30P060FTC	
17	Base Chassis	ANA1811	47	•••••		
18	Front Chassis	See Contrast table (2)	48	•••••		
19	Terminal Panel	See Contrast table (2)	49	FFC Cushion (XE)	See Contrast table (2)	
20	Heatsink HDMI	ANH1618	50	SR Holder E	ANG2581	C
21	•••••		51	Gasket	ANK1730	
22	Fan Holder	ANG2568	52	Front Ground Spacer	AEC2016	
23	HDMI Shield	ANG2646				
24	Insulation Rubber	AEB1377				
25	Silicone Sheet HDMI	AEB1379				
26	PCB Holder	AEC1097				
27	Spacer	AEC1256				
28	Locking Card Spacer	AEC1429				
29	Nylon Rivet	AEC1671				D
30	Wire Saddle	AEC1745				

(2) CONTRAST TABLE

PDP-R05E/WYVI, /WYVIXK, PDP-R05XE/WYVIXK, PDP-R05FE/WYVI and / WYVIXK are constructed the same except for the following:

Mark	No.	Description	PDP-R05E/ WYVI	PDP-R05E/ WYVIXK	PDP-R05XE/ WYVIXK	PDP-R05FE/ WYVI	PDP-R05FE/ WYVIXK
	1	MR MAIN BOARD Assy	AWZ6944	AWZ6944	AWZ6990	AWZ6945	AWZ6945
	2	AV BOARD Assy	AWZ6946	AWZ6946	AWZ6986	AWZ6947	AWZ6947
	4	SR Assy	AWZ6949	AWZ6949	AWZ6949	AWZ6950	AWZ6950
	5	FRONT Assy	AWZ6951	AWZ6951	AWZ6951	AWZ6952	AWZ6952
	6	LED Assy	AWZ6953	AWZ6953	AWZ6953	AWZ6954	AWZ6954
	18	Front Chassis E	ANB1867	ANB1867	ANB1867	Not used	Not used
	18	Front Chassis	Not used	Not used	Not used	ANB1866	ANB1866
	19	Terminal Panel E	ANC2363	ANC2369	Not used	Not used	Not used
	19	Terminal Panel XE	Not used	Not used	ANC2362	Not used	Not used
	19	Terminal Panel FE	Not used	Not used	Not used	ANC2364	ANC2370
	49	FFC Cushion (XE)	Not used	Not used	AEB1407	Not used	Not used

2.4 FRONT PANEL SECTION

A

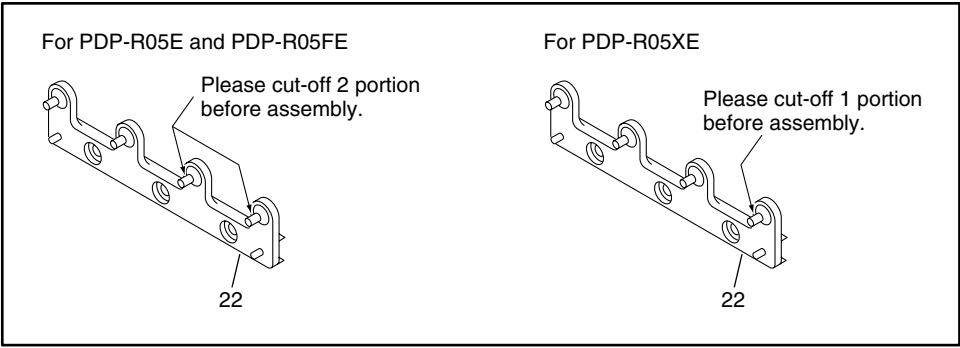
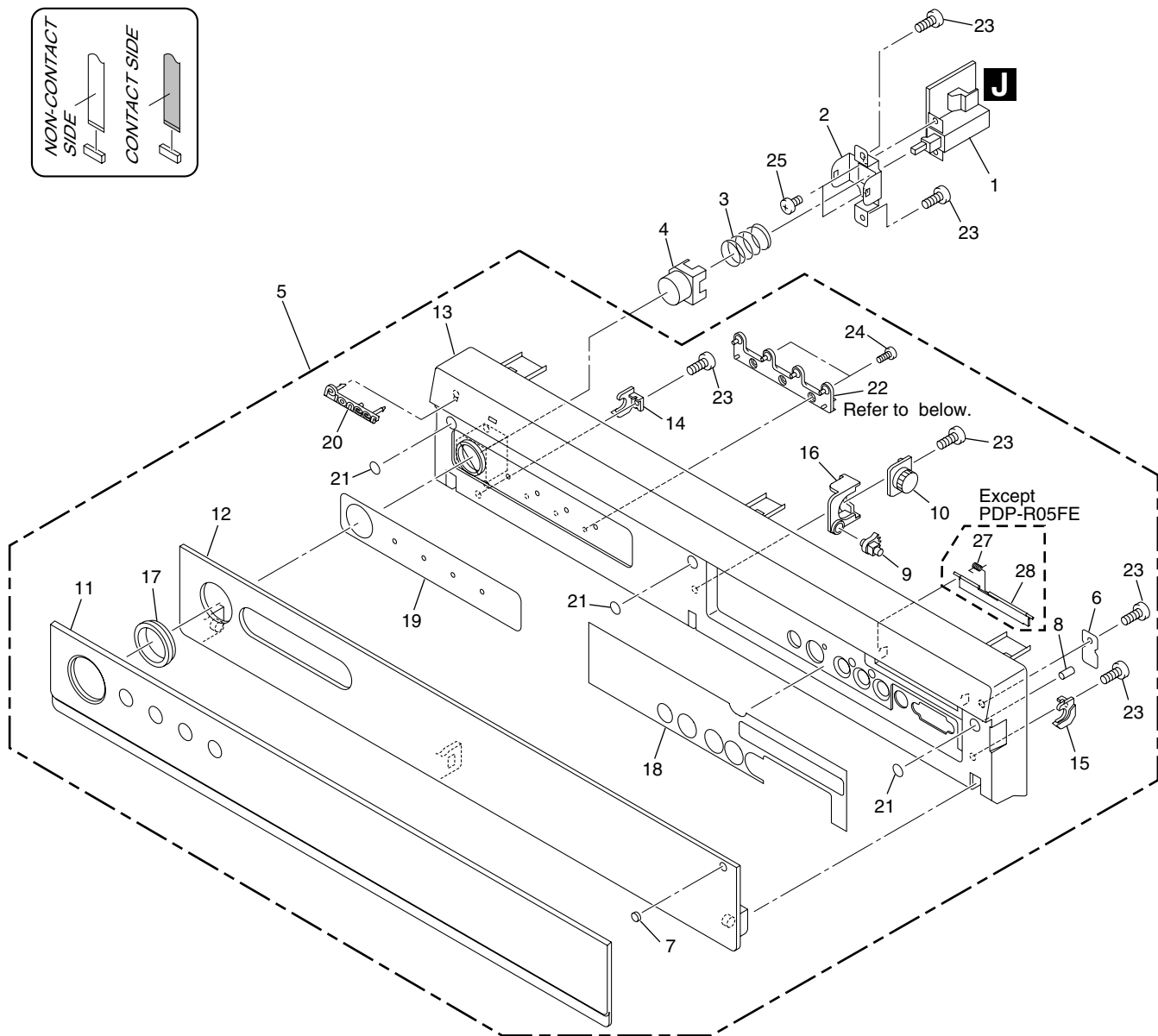
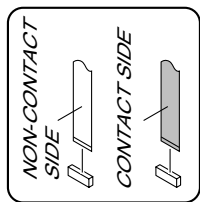
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FRONT PANEL SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	SW Assy	AWZ6920	16	Damper Holder	AMR3416
2	SW Holder	ANG2670	17	Escutcheon Ring	ADD4130
3	SW Spring	ABH1109	18	Sealing Sheet	See Contrast table (2)
4	Power Button	ADD4128	19	Sealing Sheet S	See Contrast table (2)
5	Front Panel Assy	See Contrast table (2)	20	Pioneer Badge	VAM1124
6	Magnet Holder	ANG2671	21	Door Cushion	See Contrast table (2)
7	Magnet Catcher	ANG2675	22	LED Lens	AMR3417
8	Magnet	AMF1004	23	Screw	BPZ30P100FTB
9	Gear	AMR3418	24	Screw	JPZ20P035FNI
10	Damper	AXA1018	25	Screw	BMZ30P060FTC
11	Panel	See Contrast table (2)	26	•••••	
12	Door	AAN1473	27	PC Spring	See Contrast table (2)
13	Front Panel	See Contrast table (2)	28	PC Card Door	See Contrast table (2)
14	Door Holder L	AMR3414			
15	Door Holder R	AMR3415			

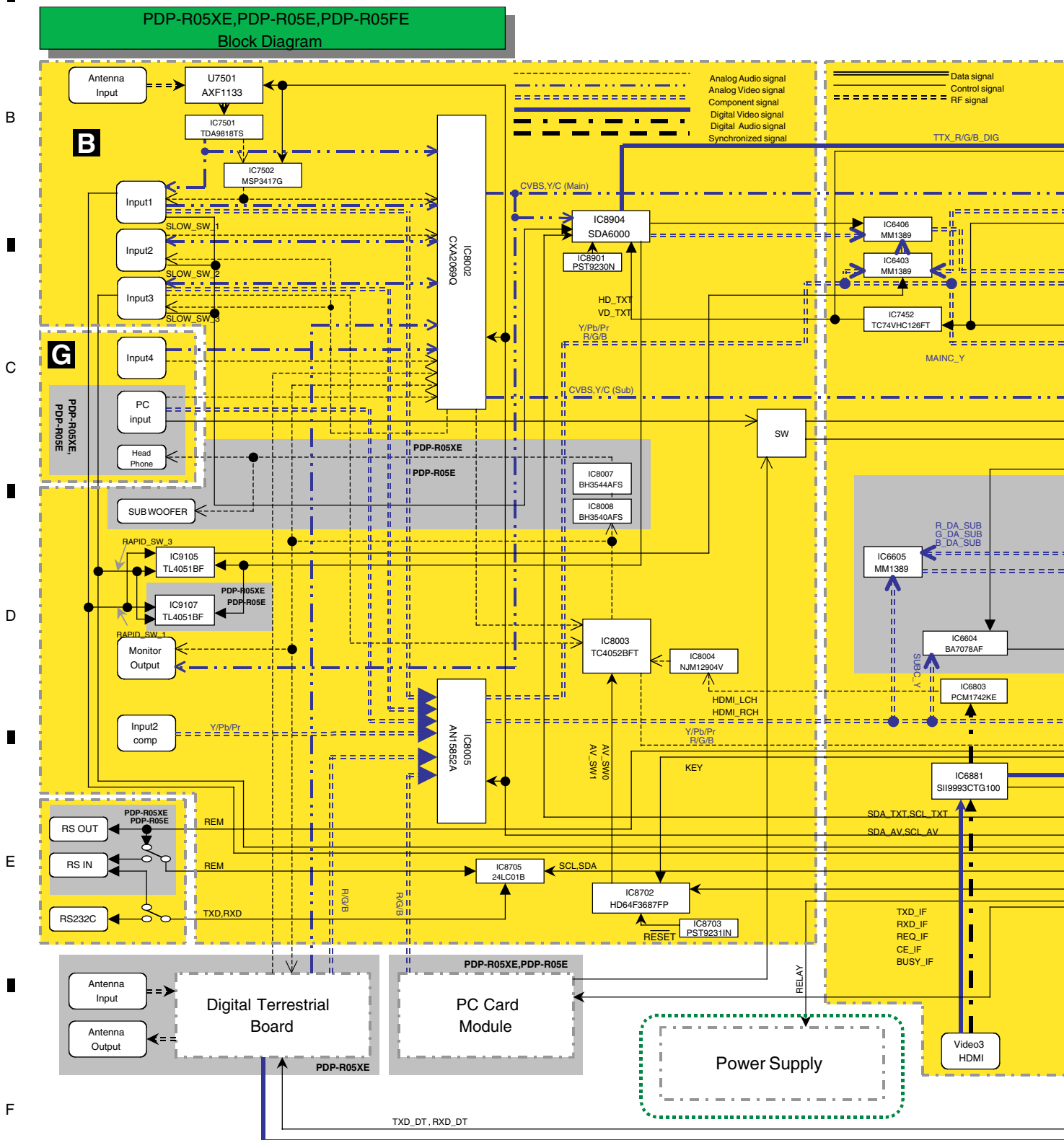
(2) CONTRAST TABLE

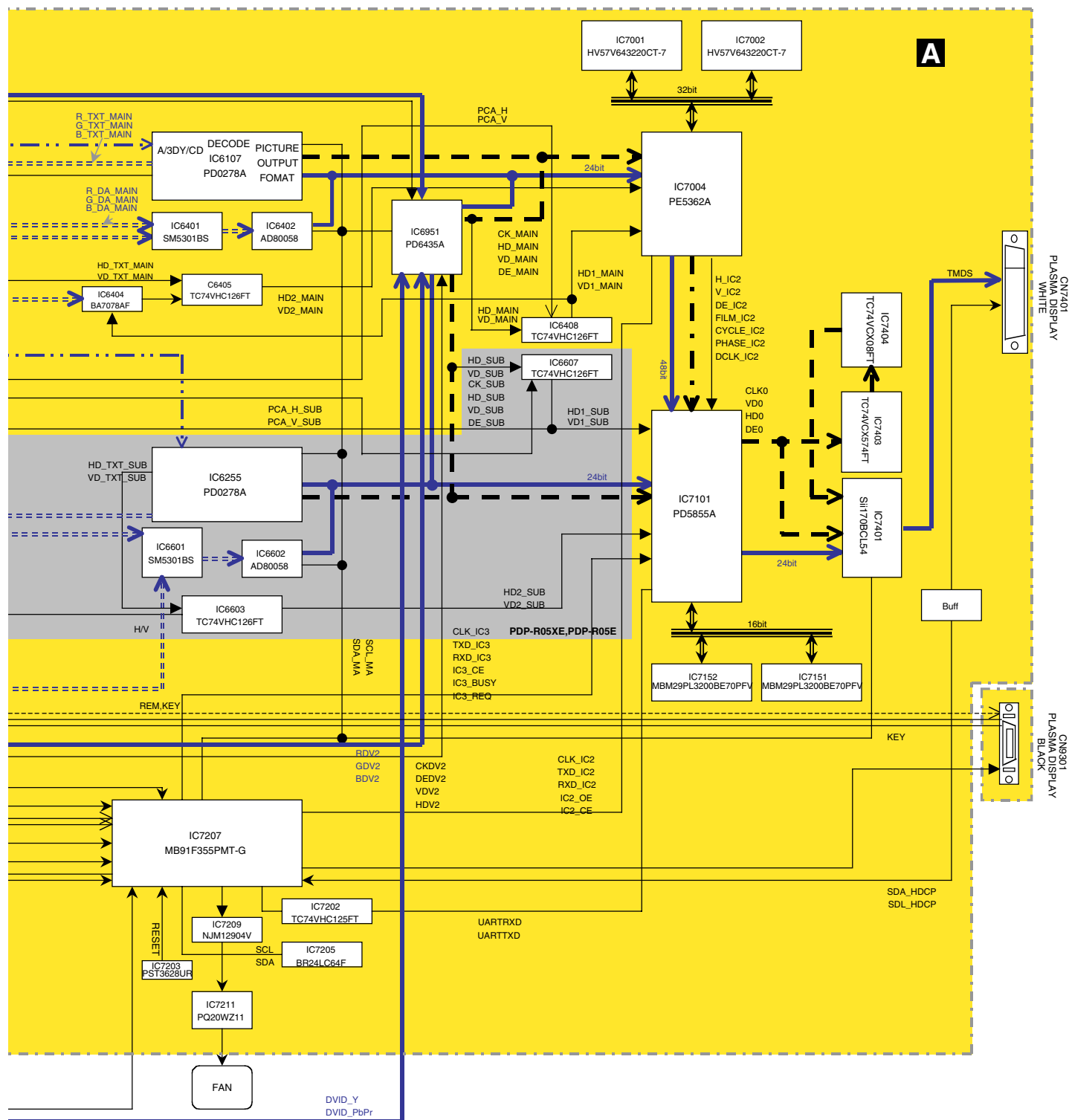
PDP-R05E/WYVI, /WYVIXK, PDP-R05XE/WYVIXK, PDP-R05FE/WYVI and / WYVIXK are constructed the same except for the following:

Mark	No.	Description	PDP-R05E/ WYVI	PDP-R05E/ WYVIXK	PDP-R05XE/ WYVIXK	PDP-R05FE/ WYVI	PDP-R05FE/ WYVIXK
	5	Front Panel Assy E	AXG1021	AXG1021	Not used	Not used	Not used
	5	Front Panel Assy XE	Not used	Not used	AXG1020	Not used	Not used
	5	Front Panel Assy FE	Not used	Not used	Not used	AXG1022	AXG1022
	11	Panel (E)	AAK2826	AAK2826	Not used	AAK2826	AAK2826
	11	Panel (XE)	Not used	Not used	AAK2825	Not used	Not used
	13	Front Panel (E)	AMB2829	AMB2829	Not used	Not used	Not used
	13	Front Panel (XE)	Not used	Not used	AMB2828	Not used	Not used
	13	Front Panel (FE)	Not used	Not used	Not used	AMB2830	AMB2830
	18	Sealing Sheet (XE E)	AAL2547	AAL2547	AAL2547	Not used	Not used
	18	Sealing Sheet (FE)	Not used	Not used	Not used	AAL2548	AAL2548
	19	Sealing Sheet S (GC)	AAL2555	AAL2555	Not used	AAL2555	AAL2555
	19	Sealing Sheet S (E)	Not used	Not used	AAL2554	Not used	Not used
	21	Door Cushion	AEB1391	AEB1391	AEB1391	AEB1394	AEB1394
	27	PC Spring	ABH1112	ABH1112	ABH1112	Not used	Not used
	28	PC Card Door	AMR3365	AMR3365	AMR3365	Not used	Not used

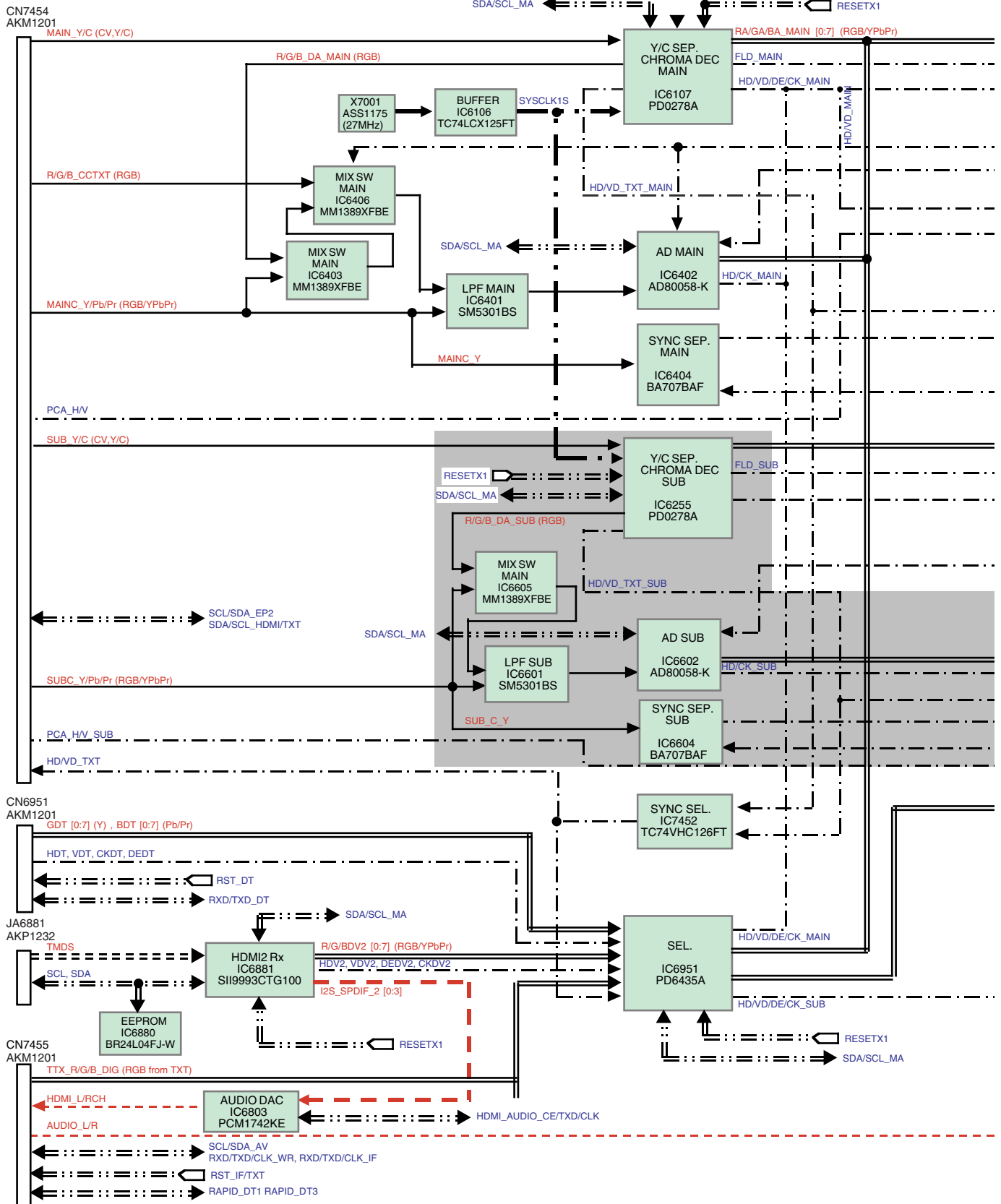
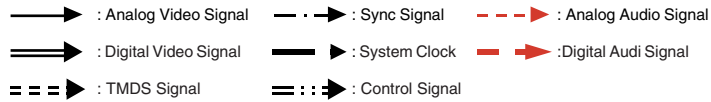
3.1.1 SIGNAL ROUTE

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3.1.2 MR MAIN BOARD ASSY





3.1.3 AV BOARD ASSY

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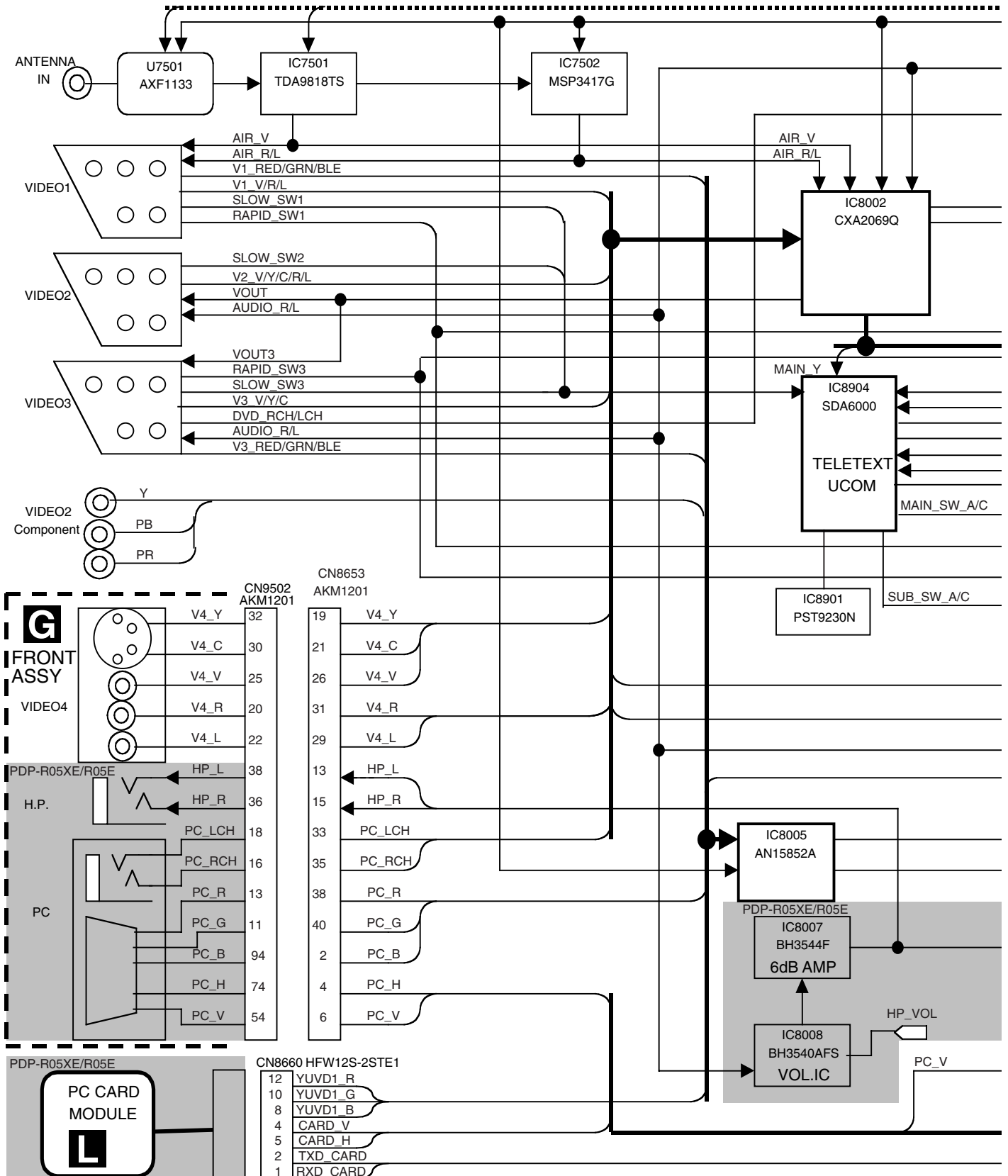
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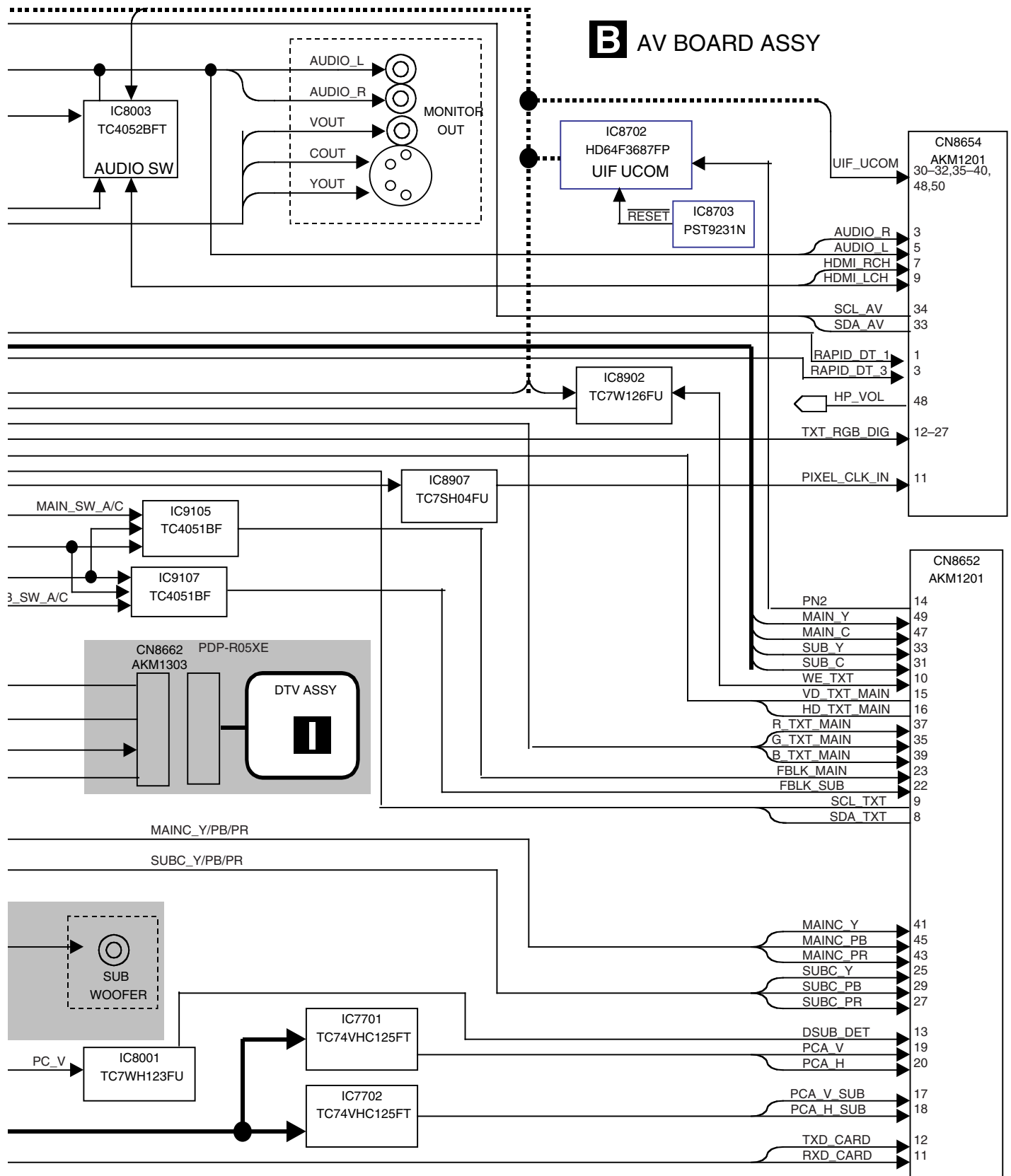
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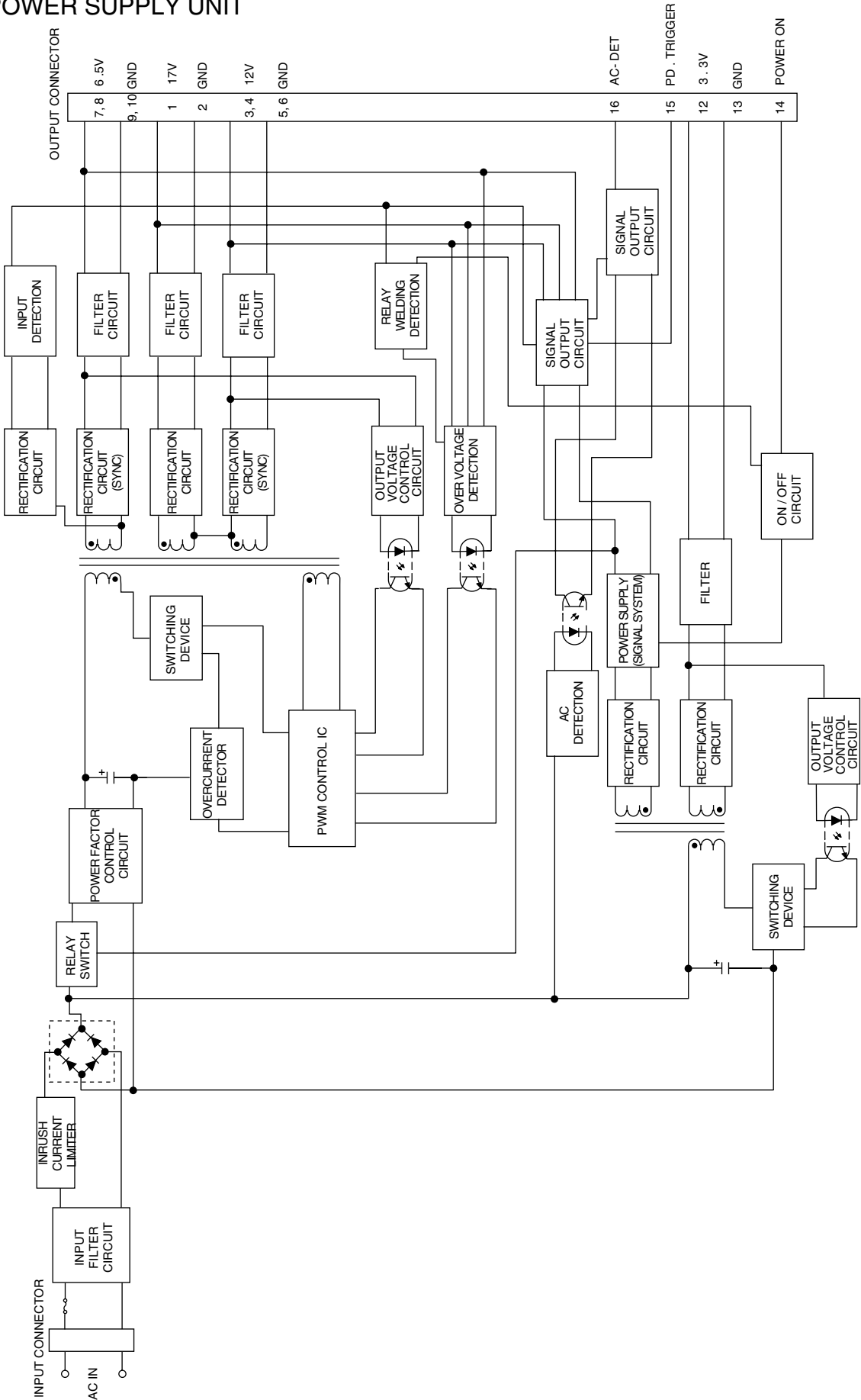
F



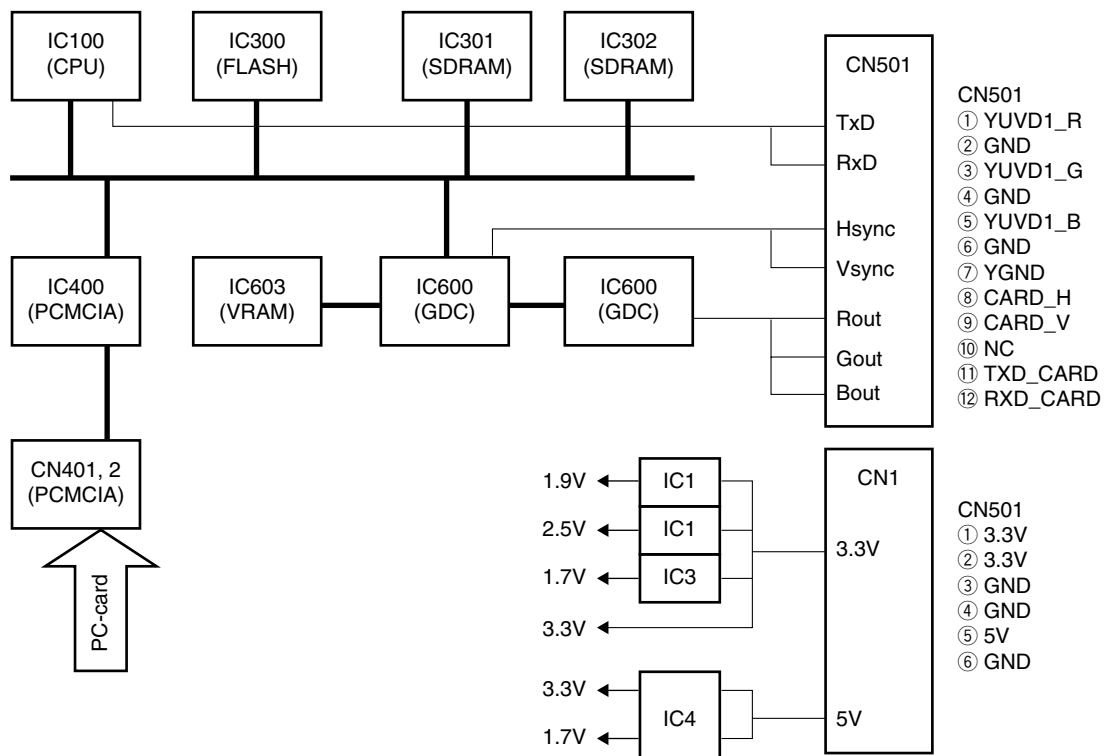


3.1.4 POWER SUPPLY UNIT

K POWER SUPPLY UNIT



J PC CARD MODULE

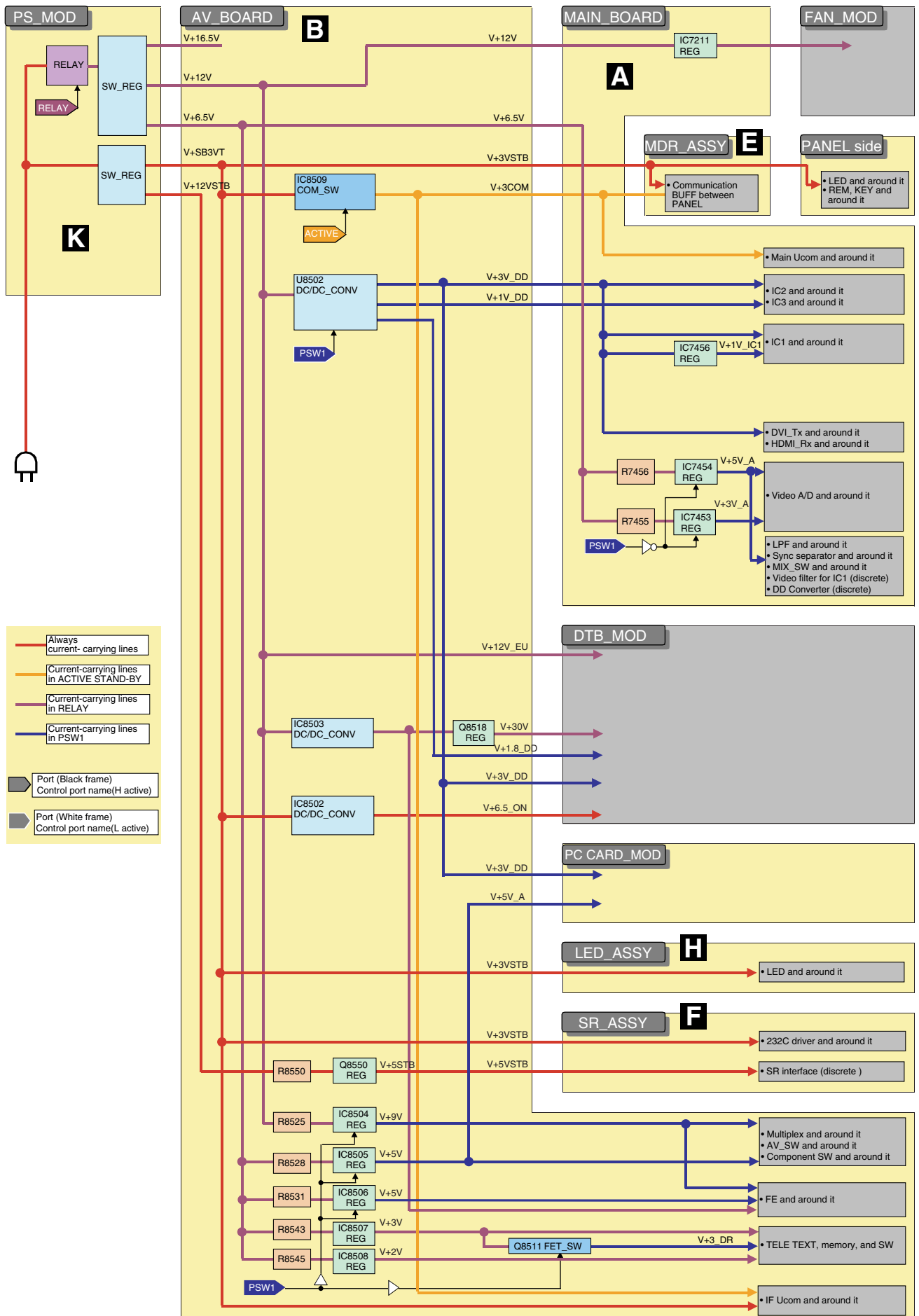


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
3.1.7 POWER SUPPLY




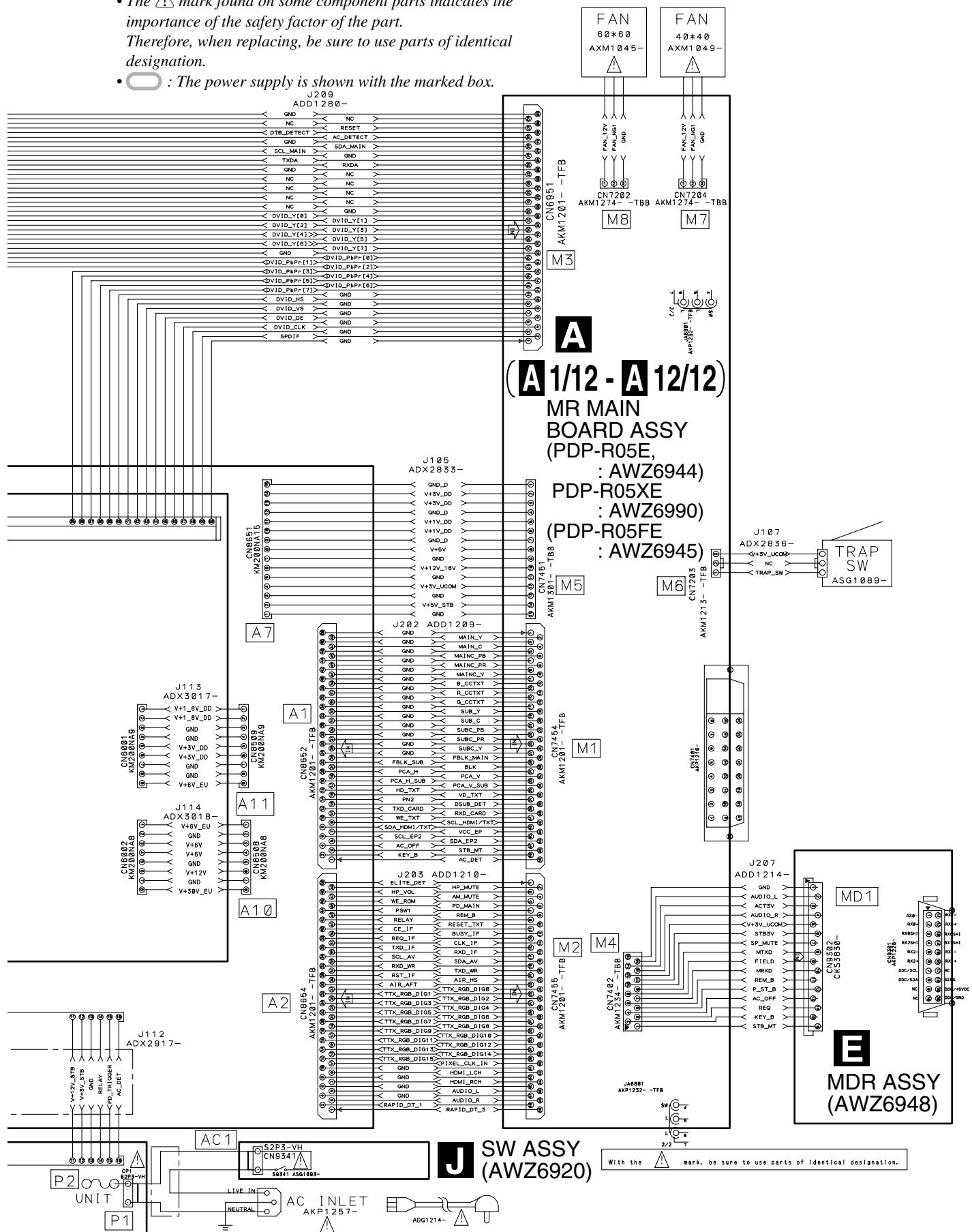
4



NOTES: • When ordering service parts, be sure to refer to “EXPLODED VIEWS and PARTS LIST” or “PCB PARTS LIST”.

- The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

-  : The power supply is shown with the marked box.

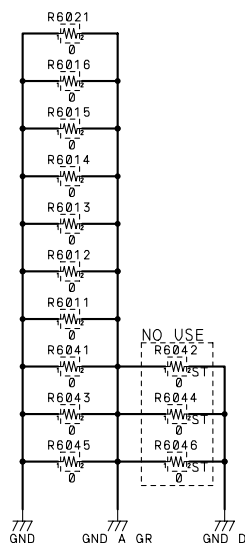


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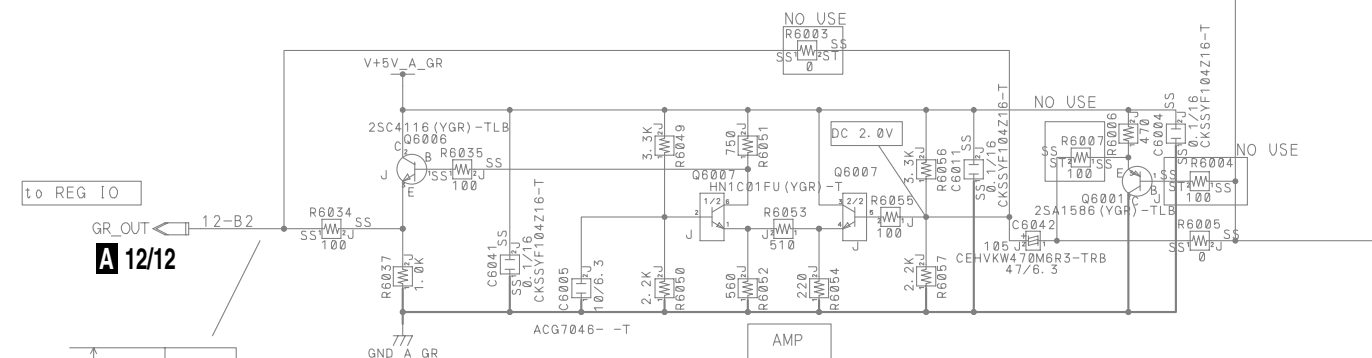
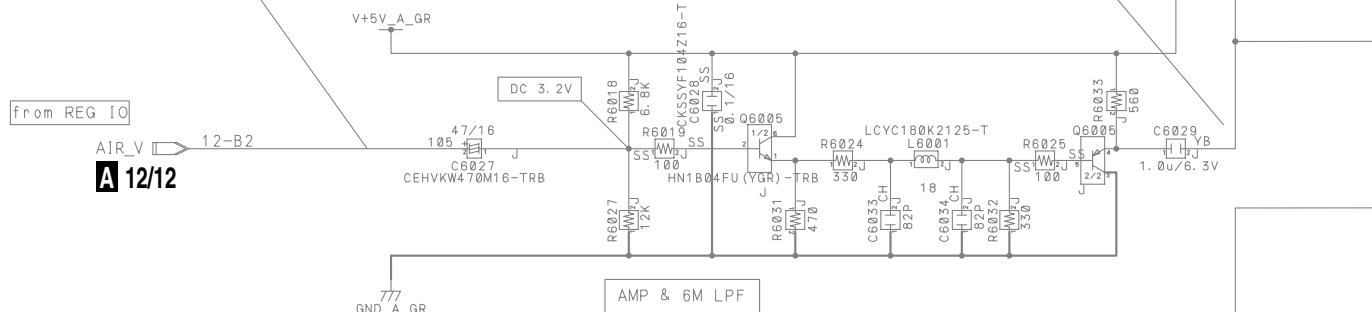
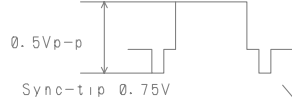
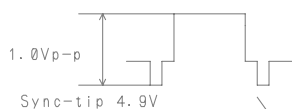
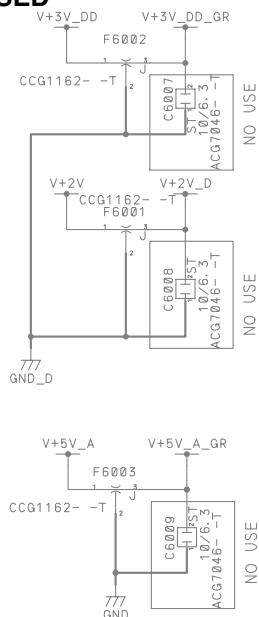
3.3 MR MAIN BOARD ASSY (1/12)

A 1/12 MR MAIN BOARD ASSY
(PDP-R05E : AWZ6944)
(PDP-R05XE : AWZ6990)
(PDP-R05FE : AWZ6945)

● GR BLOCK



NOT USED



NOT USED

A 1/12

A 2/12 MR MAIN BOARD ASSY (PDP-R05E : AWZ6944)
 ● MICHEL MAIN BLOCK (PDP-R05XE : AWZ6990)
 (PDP-R05FE : AWZ6945)





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A 12/12

A 8/12

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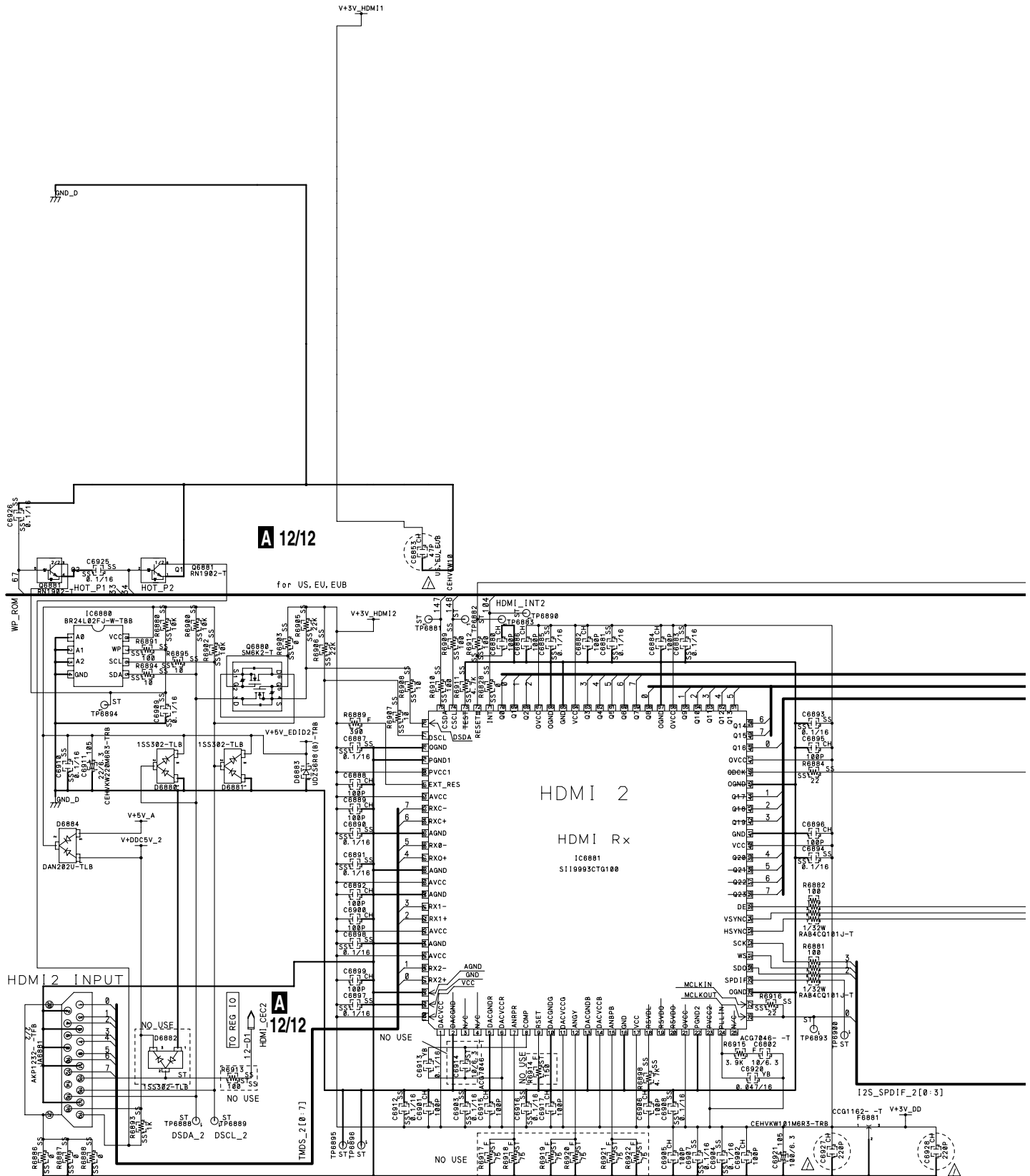
A 5/12 MR MAIN BOARD ASSY (PDP-R05E : AWZ6944)
 ● AD SUB BLOCK (PDP-R05XE : AWZ6990)
 (PDP-R05FE : AWZ6945)





3.8 MR MAIN BOARD ASSY (6/12)

A 6/12 MR MAIN BOARD ASSY (PDP-R05E : AWZ6944)
● HDMI RX BLOCK (PDP-R05XE : AWZ6990)
(PDP-R05FE : AWZ6945)



A 6/12



A 7/12 MR MAIN BOARD ASSY (PDP-R05E : AWZ6944)
 ● ROZ BLOCK (PDP-R05XE : AWZ6990)
 (PDP-R05FE : AWZ6945)

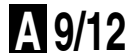


A 8/12 MR MAIN BOARD ASSY (PDP-R05E : AWZ6944)
 ● CELIA BLOCK (PDP-R05XE : AWZ6990)
 (PDP-R05FE : AWZ6945)

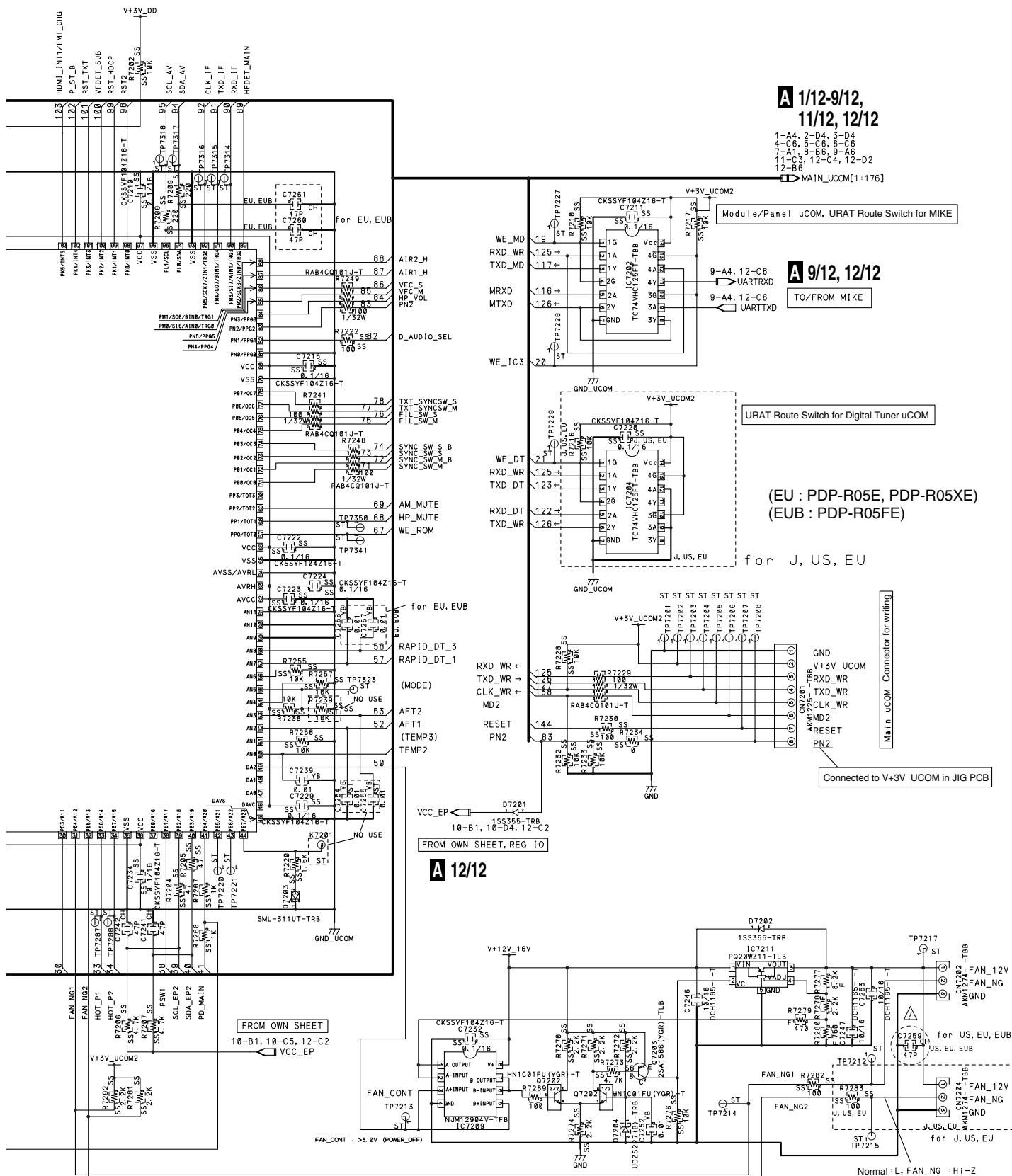


A 9/12 MR MAIN BOARD ASSY (PDP-R05E : AWZ6944) (PDP-R05XE : AWZ6990)
● MIKE BLOCK (PDP-R05FE : AWZ6945)



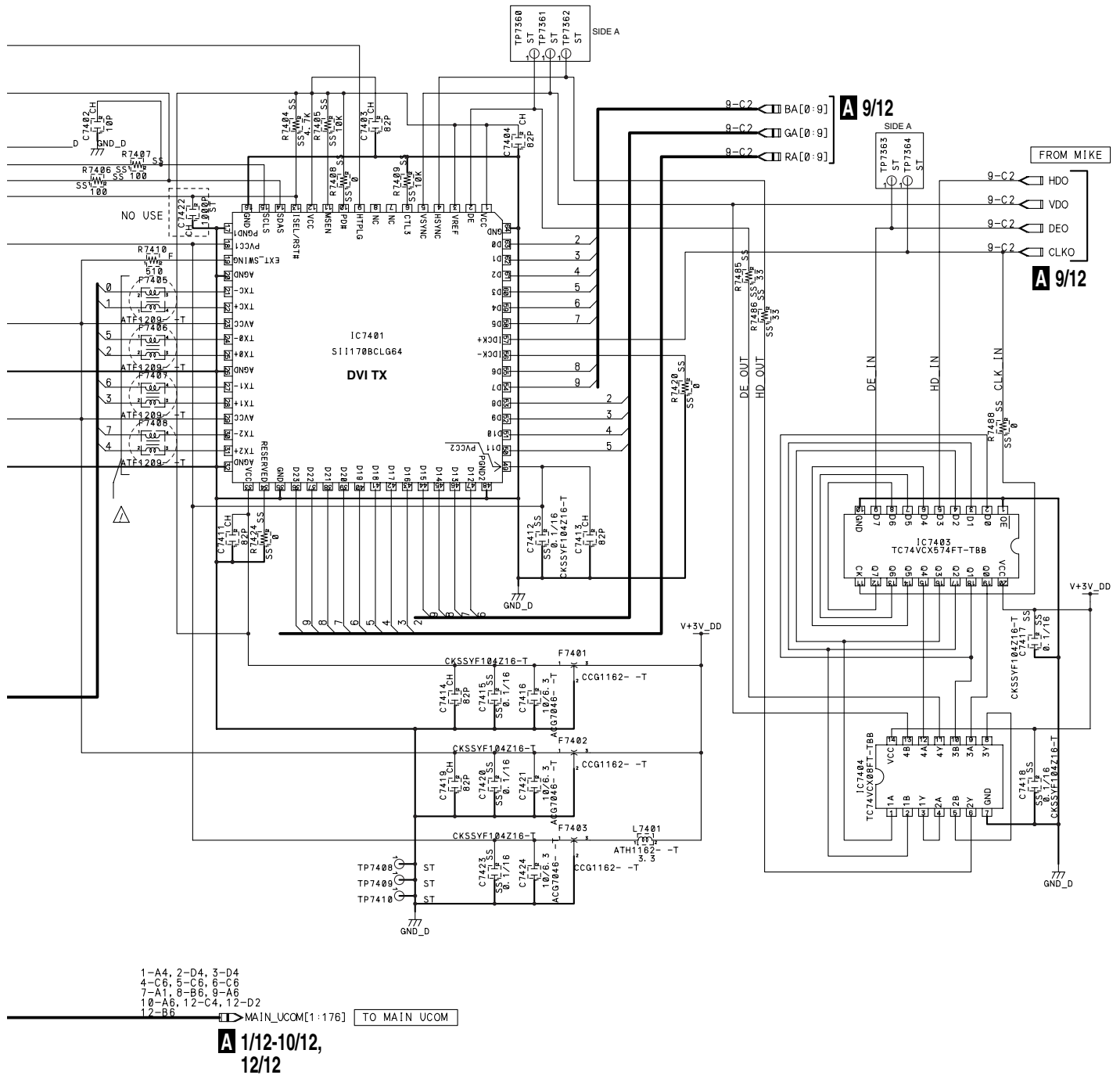


48



- **MR I/F BLOCK**

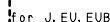




△

C

F

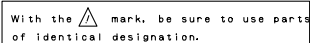


J A 12/12



A





3.17 AV BOARD ASSY (3/9)

B 3/9 AV BOARD ASSY (PDP-R05E : AWZ6946) (PDP-R05XE : AWZ6986)

● SW BLOCK

(PDP-R05FE : AWZ6947)

B 2/9, 5/9

AV_SW[0:60]

TO/FROM AV_IO

PC_H \longleftrightarrow PC_H
PC_V \longleftrightarrow PC_V
PCA_H \longleftrightarrow PCA_H
PCA_V \longleftrightarrow PCA_V

B 2/9, 5/9

PCA_H_SUB \longleftrightarrow PCA_H_SUB
PCA_V_SUB \longleftrightarrow PCA_V_SUB
CARD_H \longleftrightarrow CARD_H
CARD_V \longleftrightarrow CARD_V

B 2/9, 5/9

CARD_LCH \longleftrightarrow CARD_LCH
CARD_RCH \longleftrightarrow CARD_RCH

B 2/9

DVD_LCH \longleftrightarrow DVD_LCH
DVD_RCH \longleftrightarrow DVD_RCH
MON_MUTE \longleftrightarrow MON_MUTE

B 2/9

B 2/9, 5/9

TO/FROM AV_IO

B 2/9 SEL_R
SEL_L

TO/FROM AV_IO

B 2/9, 7/9

B 1/9, 2/9, 4/9-8/9 UIF_UCOM[1:72]

SLOW_SW_1 \longleftrightarrow SLOW_SW_1
SLOW_SW_2 \longleftrightarrow SLOW_SW_2
SLOW_SW_3 \longleftrightarrow SLOW_SW_3

B 2/9, 7/9

RAPID_SW_1 \longleftrightarrow RAPID_SW_1
RAPID_SW_3 \longleftrightarrow RAPID_SW_3

B 2/9, 8/9

AIR_V \longleftrightarrow AIR_V
AIR_L \longleftrightarrow AIR_L
AIR_R \longleftrightarrow AIR_R

B 1/9, 2/9

E

F

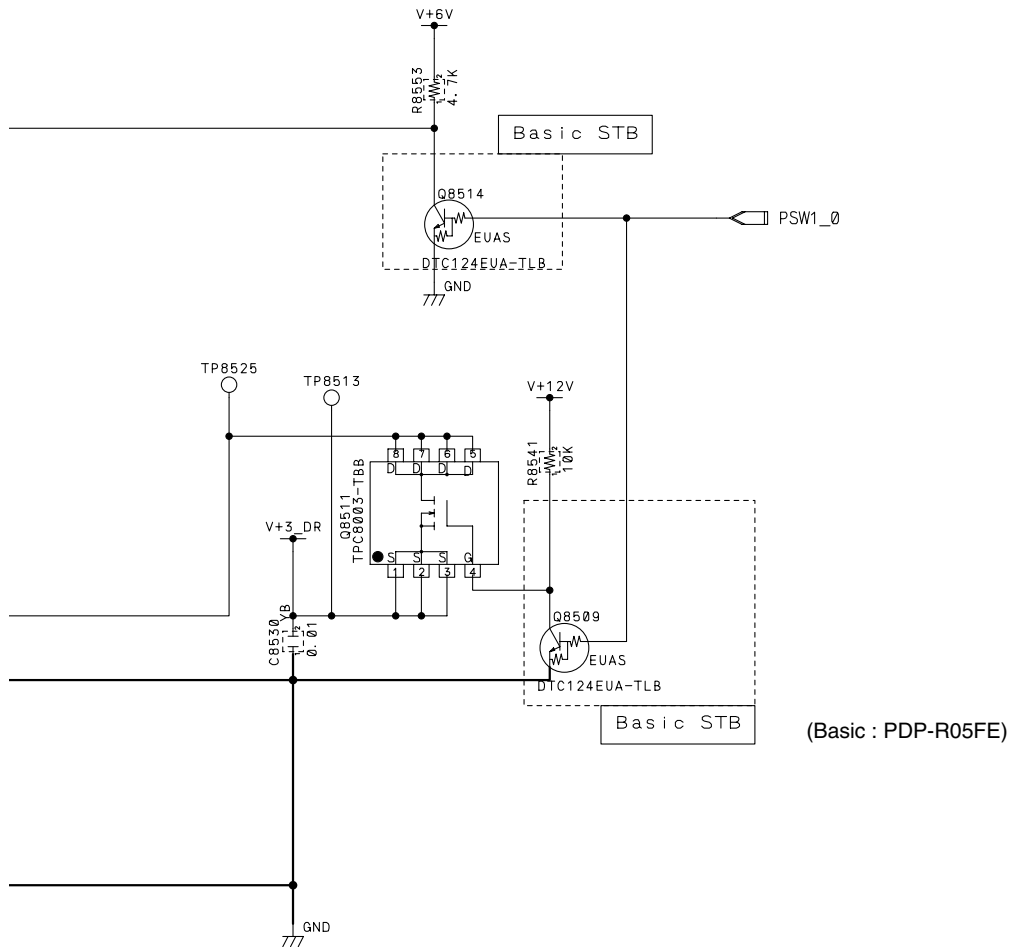
B 3/9




△

△





With the  mark, be sure to use parts of identical designation.

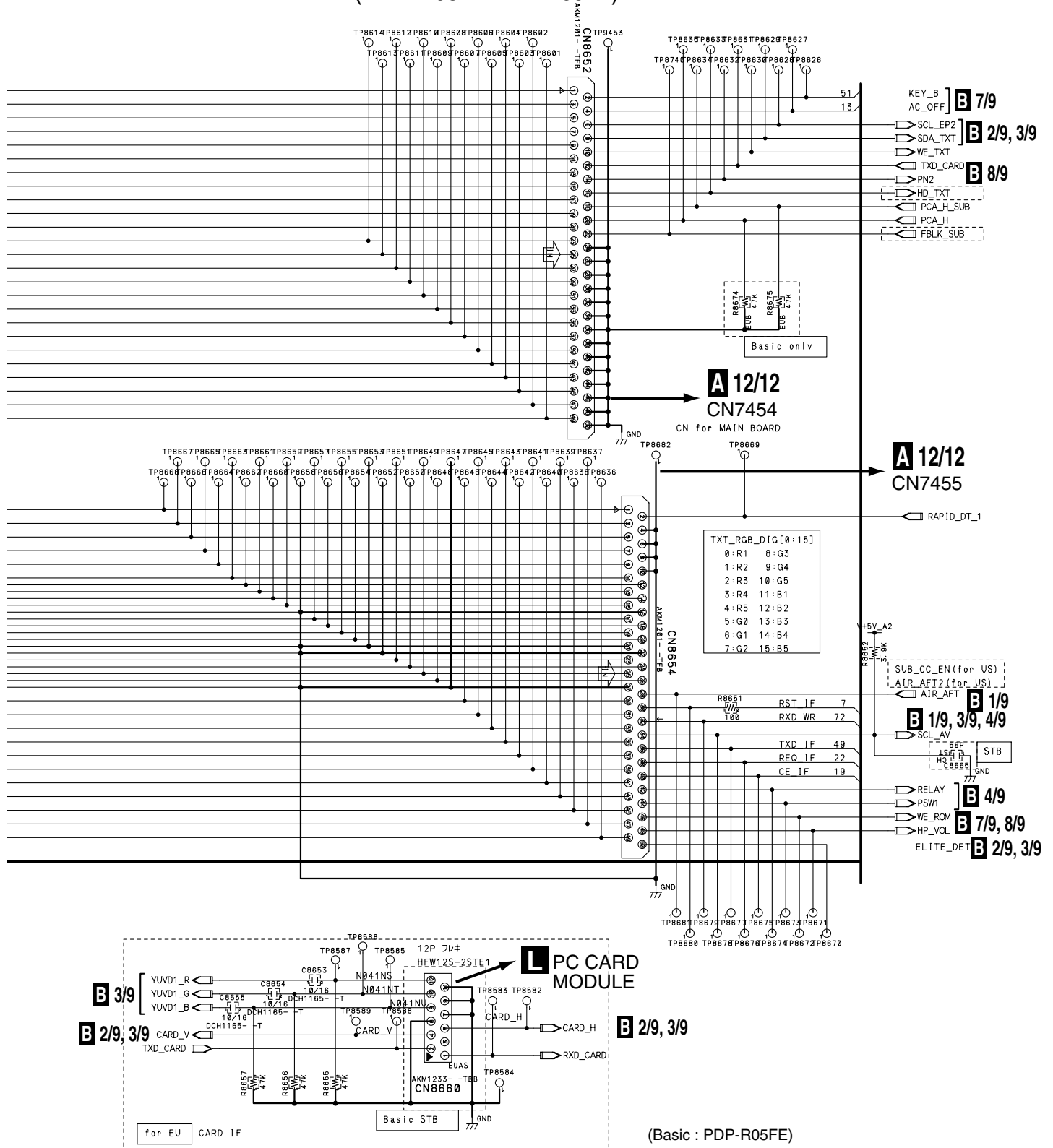
△

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B 5/9 AV BOARD ASSY (PDP-R05E : AWZ6946) (PDP-R05XE : AWZ6986)
(PDP-R05FE : AWZ6947)



B 6/9

● UCOM BLOCK



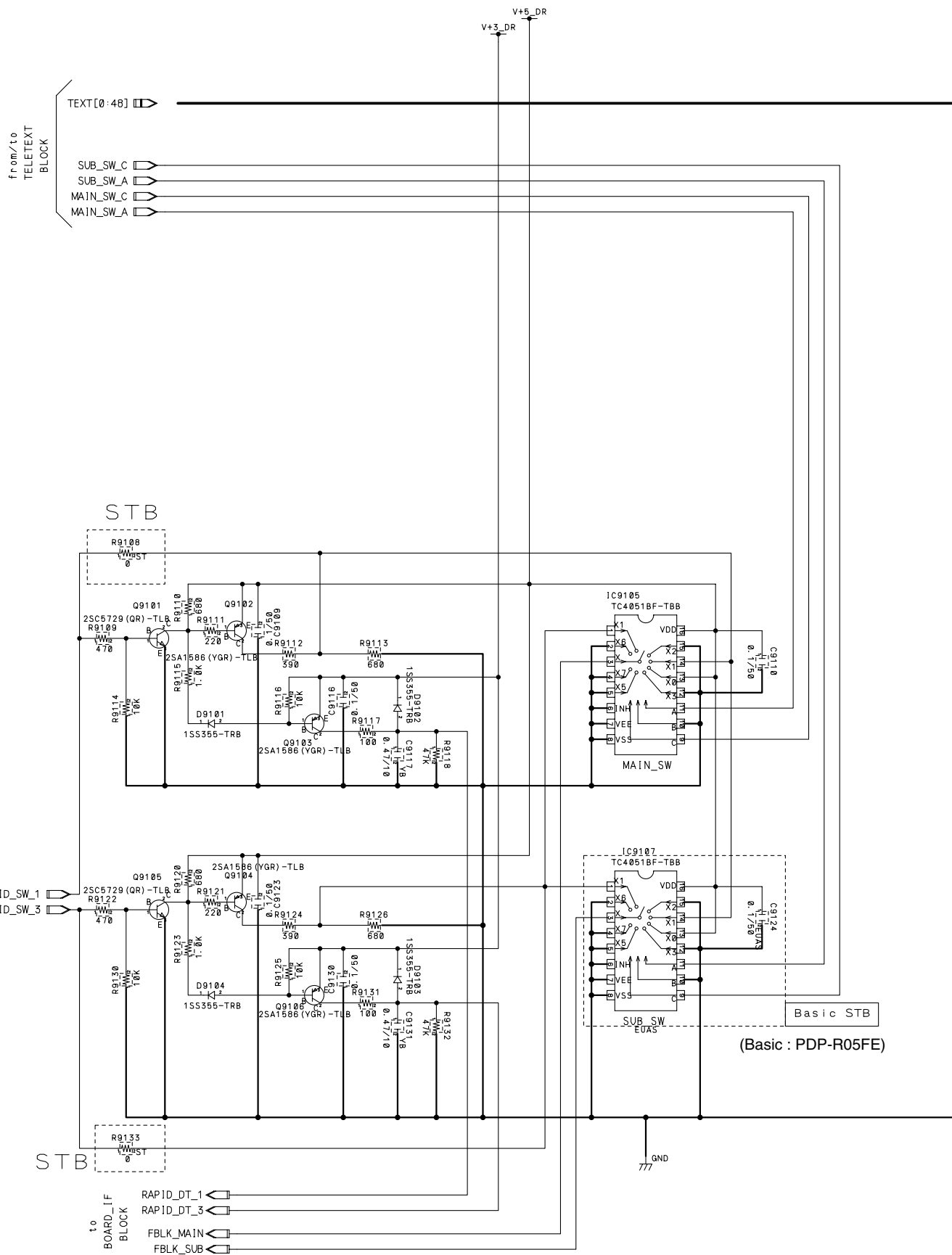


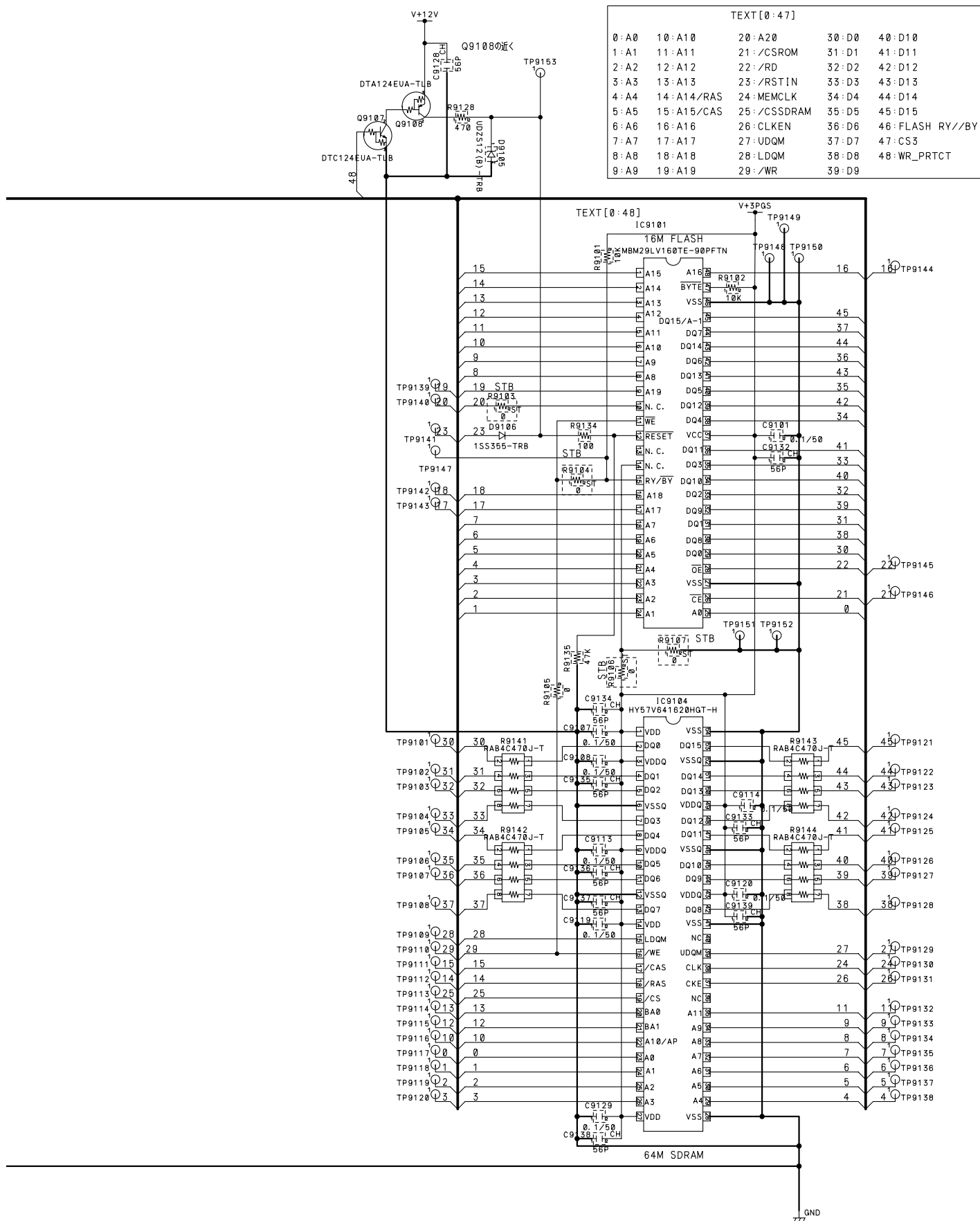
B 7/9

3.22 AV BOARD ASSY (8/9)

B 8/9 AV BOARD ASSY (PDP-R05E : AWZ6946) (PDP-R05XE : AWZ6986) (PDP-R05FE : AWZ6947)

● MEMORY_SW BLOCK





3.23 AV BOARD ASSY (9/9)

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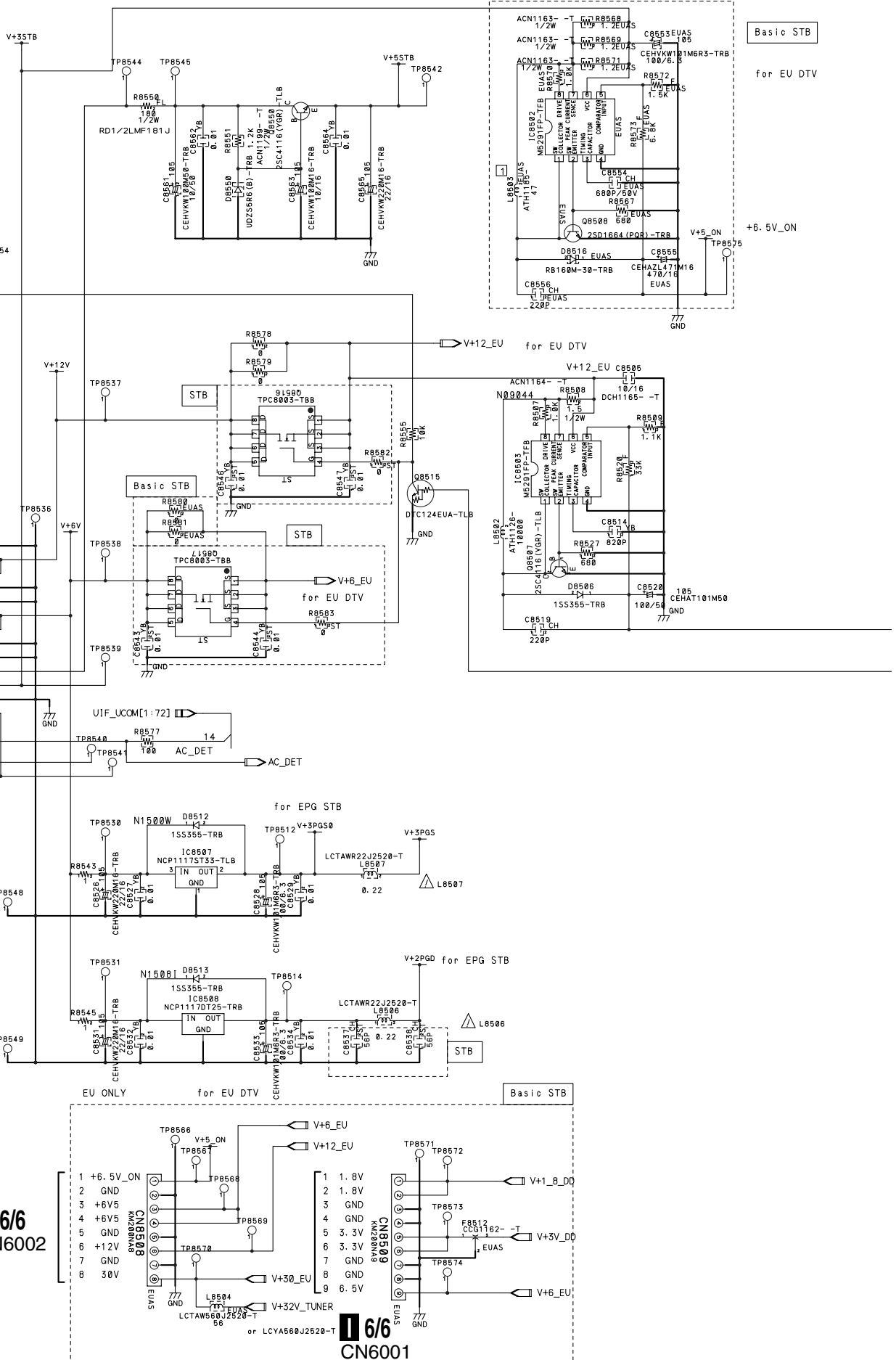
F

K CP51

6/6
CN6002

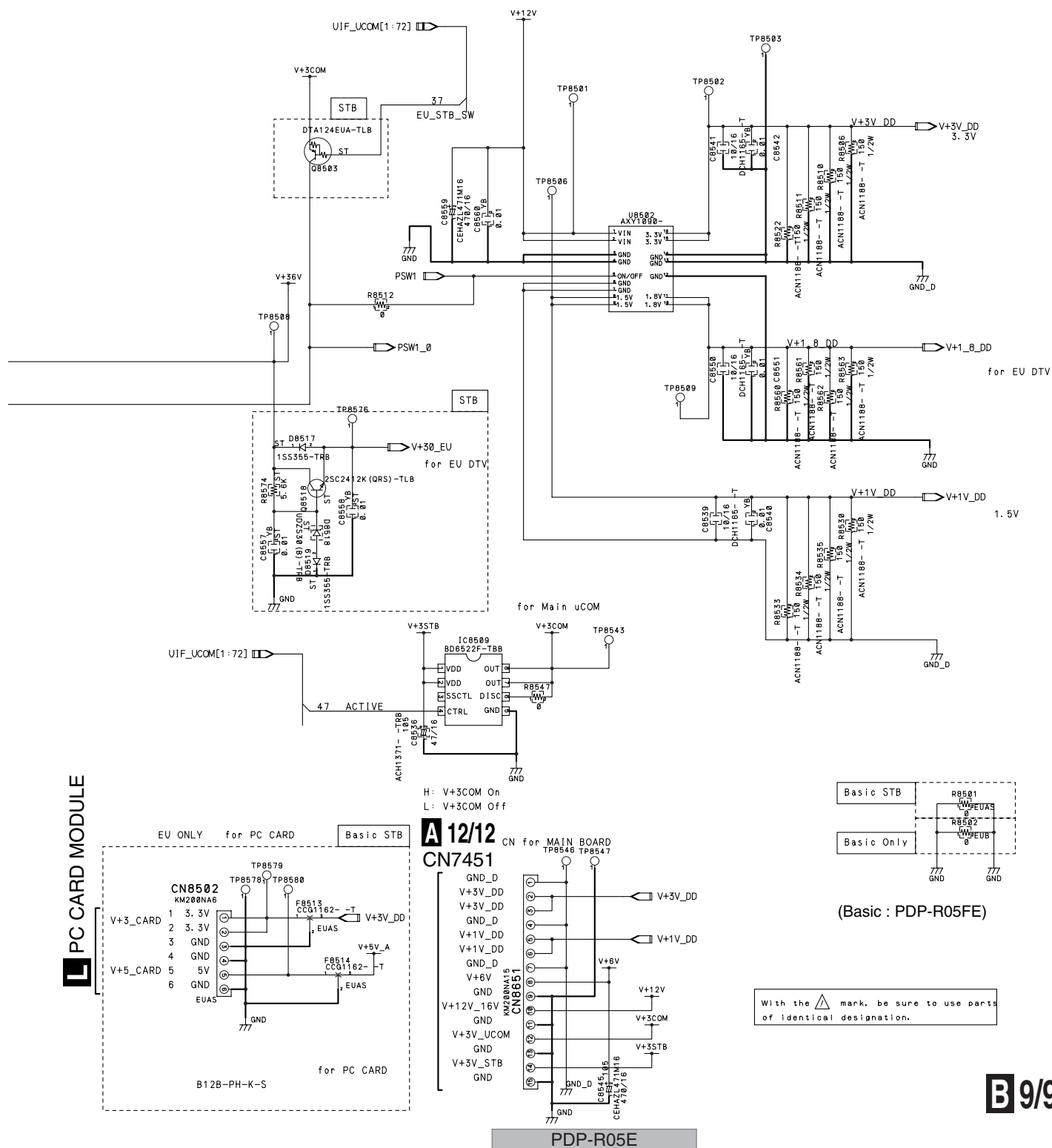
B 9/9

1 2 3 4



B9/9 AV BOARD ASSY (PDP-R05E : AWZ6946) (PDP-R05XE : AWZ6986)
 ● **BEG BLOCK 2** (PDP-R05FE : AWZ6947)

● REG BLOCK 2



3.24 MDR ASSY

E MDR ASSY (AWZ6948)

A

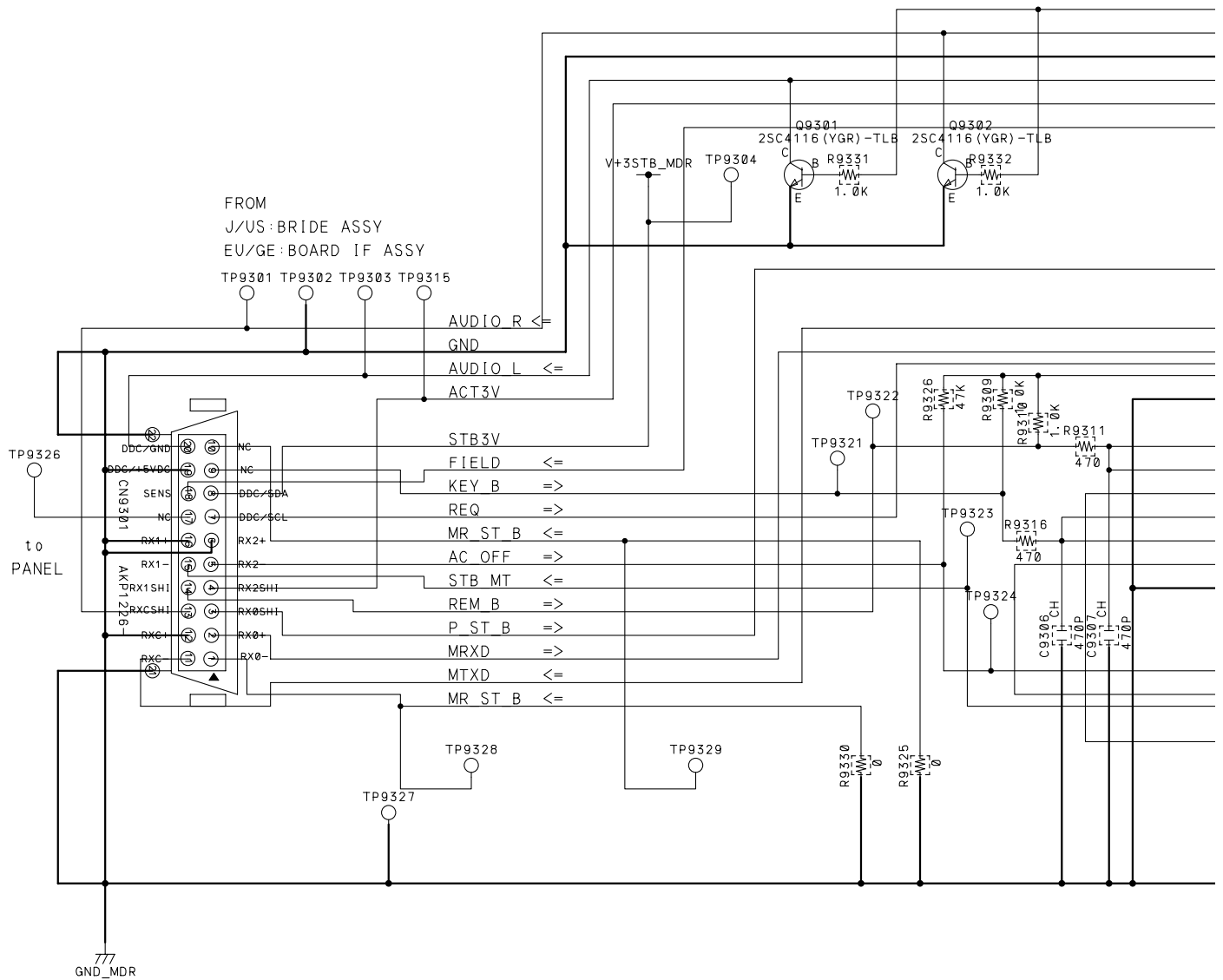
B

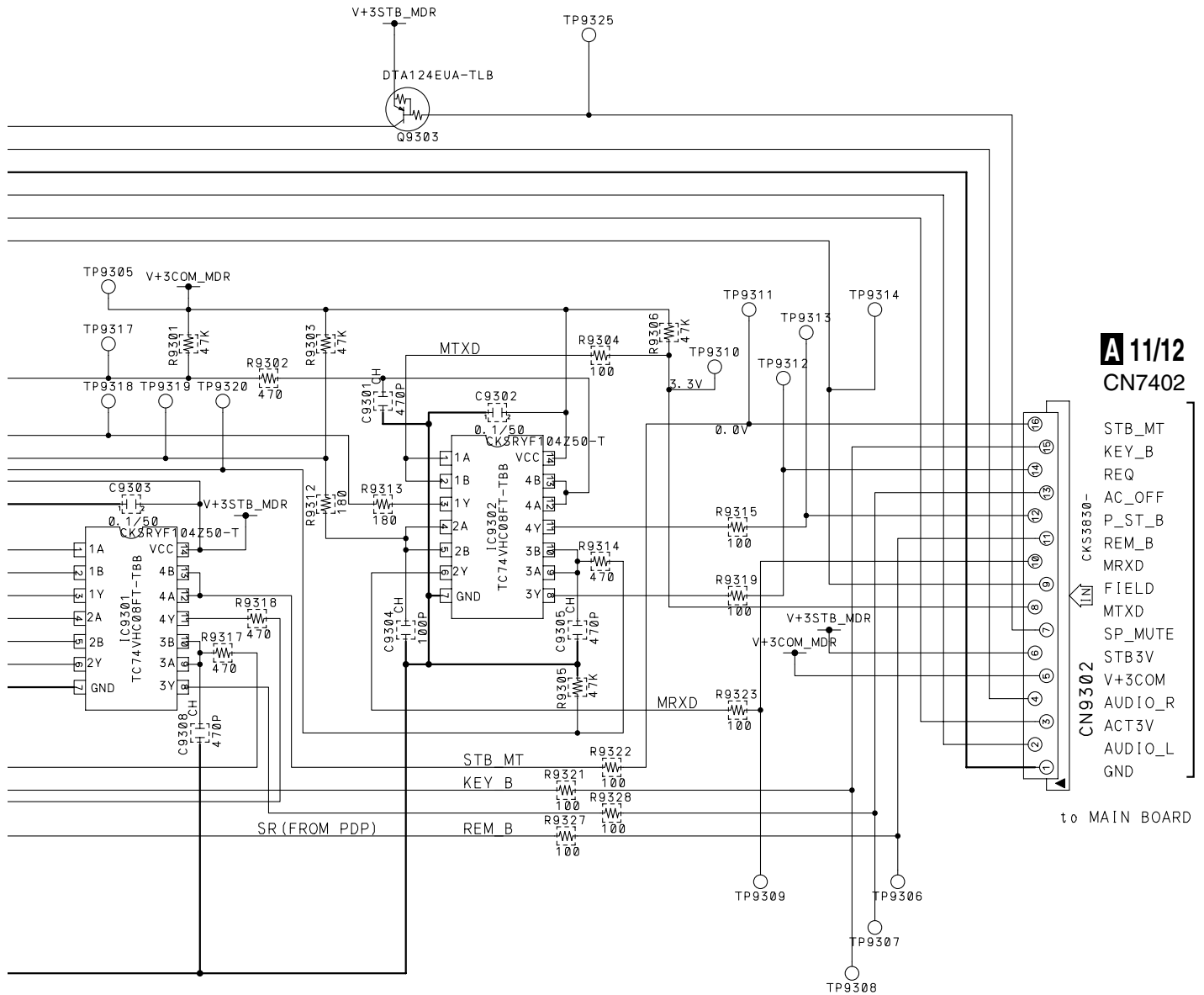
C

D

E

F





ITEM	USED	VACANT
R	9301-9332	9320
C	9301-9308	
Q	9301-9303	
D		
IC	9301, 9302	
CN	9301, 9302, 9341	
S	9341	

1

2

3

A

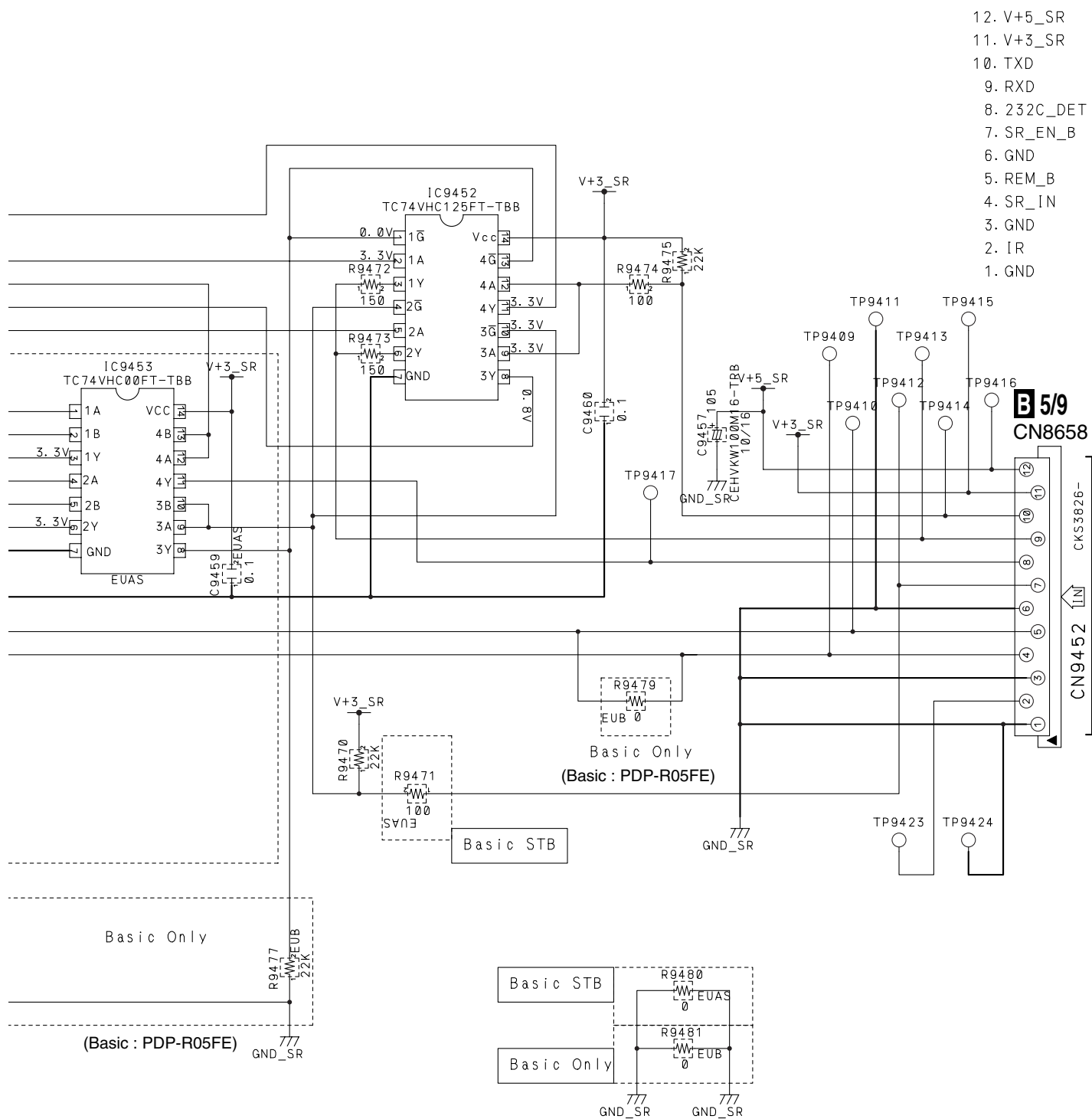


F

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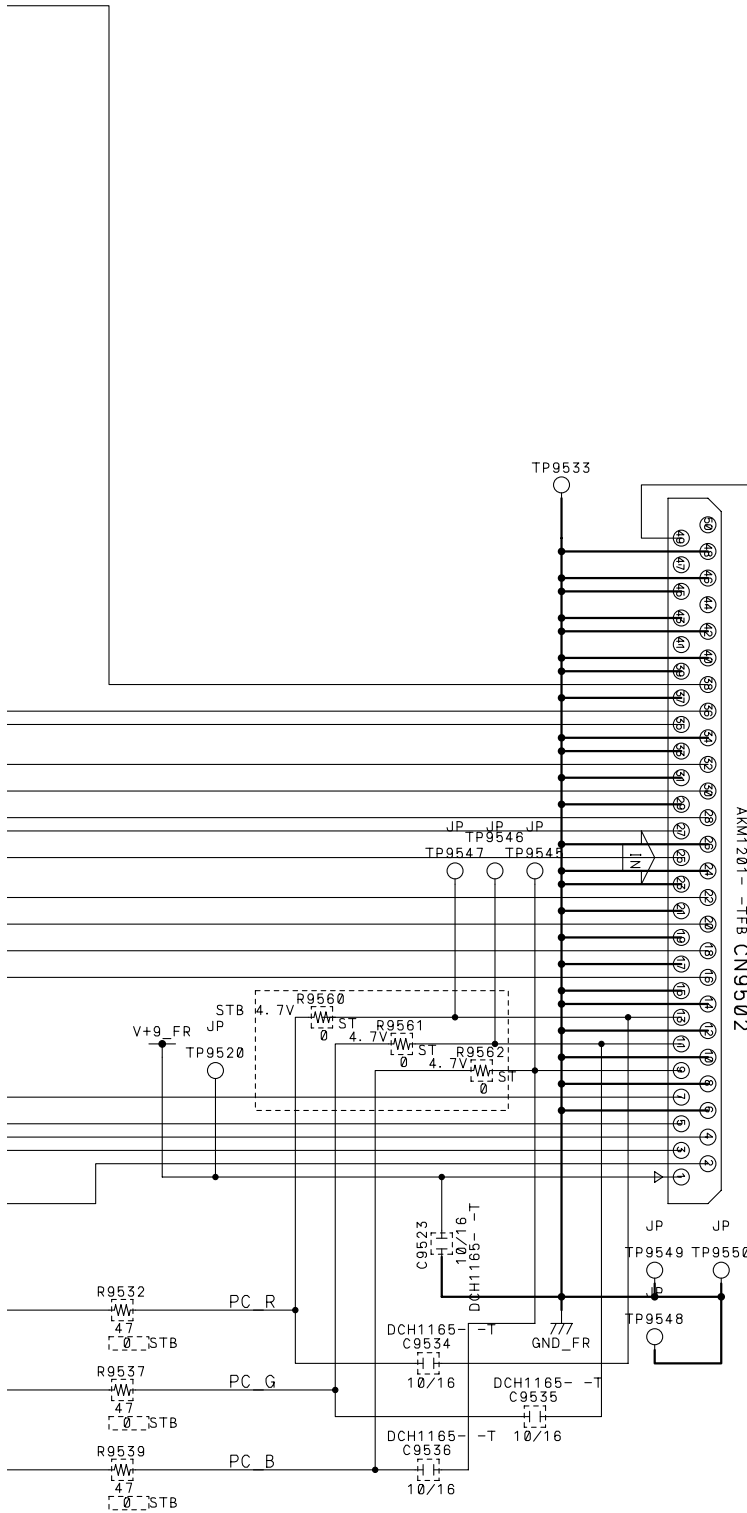
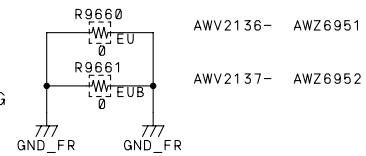
FRONT ASSY

(PDP-R05E, PDP-R05XE : AWZ6951)
(PDP-R05FE : AWZ6952)

5/9 CN8653

F 1

- | | |
|------------|---------------------|
| 25. V4_V | 50. COMP_PLUG |
| 24. GND | 49. TEMP2 |
| 23. GND | 48. GND to AV BOARD |
| 22. V4_L | 47. PR_COMP4 |
| 21. GND | 46. GND |
| 20. V4_R | 45. GND |
| 19. GND | 44. PB_COMP4 |
| 18. PC_LCH | 43. GND |
| 17. GND | 42. GND |
| 16. PC_RCH | 41. Y_COMP4 |
| 15. GND | 40. GND |
| 14. GND | 39. GND |
| 13. PC_R | 38. HP_L |
| 12. GND | 37. GND |
| 11. PC_G | 36. HP_R |
| 10. GND | 35. HP_PLUG |
| 9. PC_B | 34. GND |
| 8. GND | 33. GND |
| 7. PC_H | 32. V4_Y |
| 6. GND | 31. GND |
| 5. PC_V | 30. V4_C |
| 4. WE_ROM | 29. GND |
| 3. V+3COM | 28. V4_SPLUG |
| 2. V+5V_A | 27. V4_S2 |
| 1. V+9V_A | 26. GND |

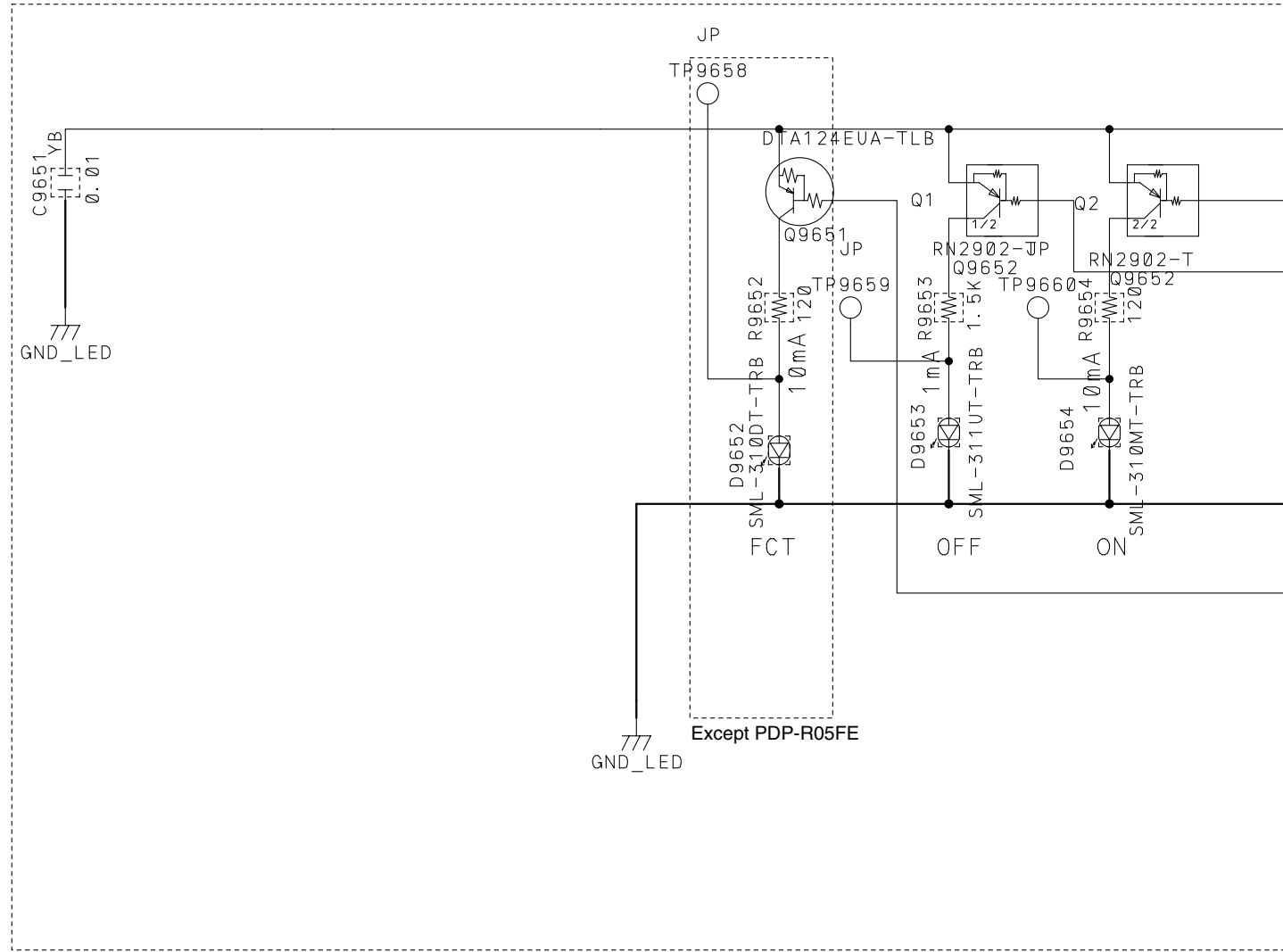


ITEM	USED	VACANT
R	9501-9583 9651, 9658-9661	9531, 9541, 9548, 9559-9567, 9538
C	9501-9540	
Q	9501-9508	
D	9501-9518	
IC	9501-9502	
CN	9502-9503	
JA	9501-9505	

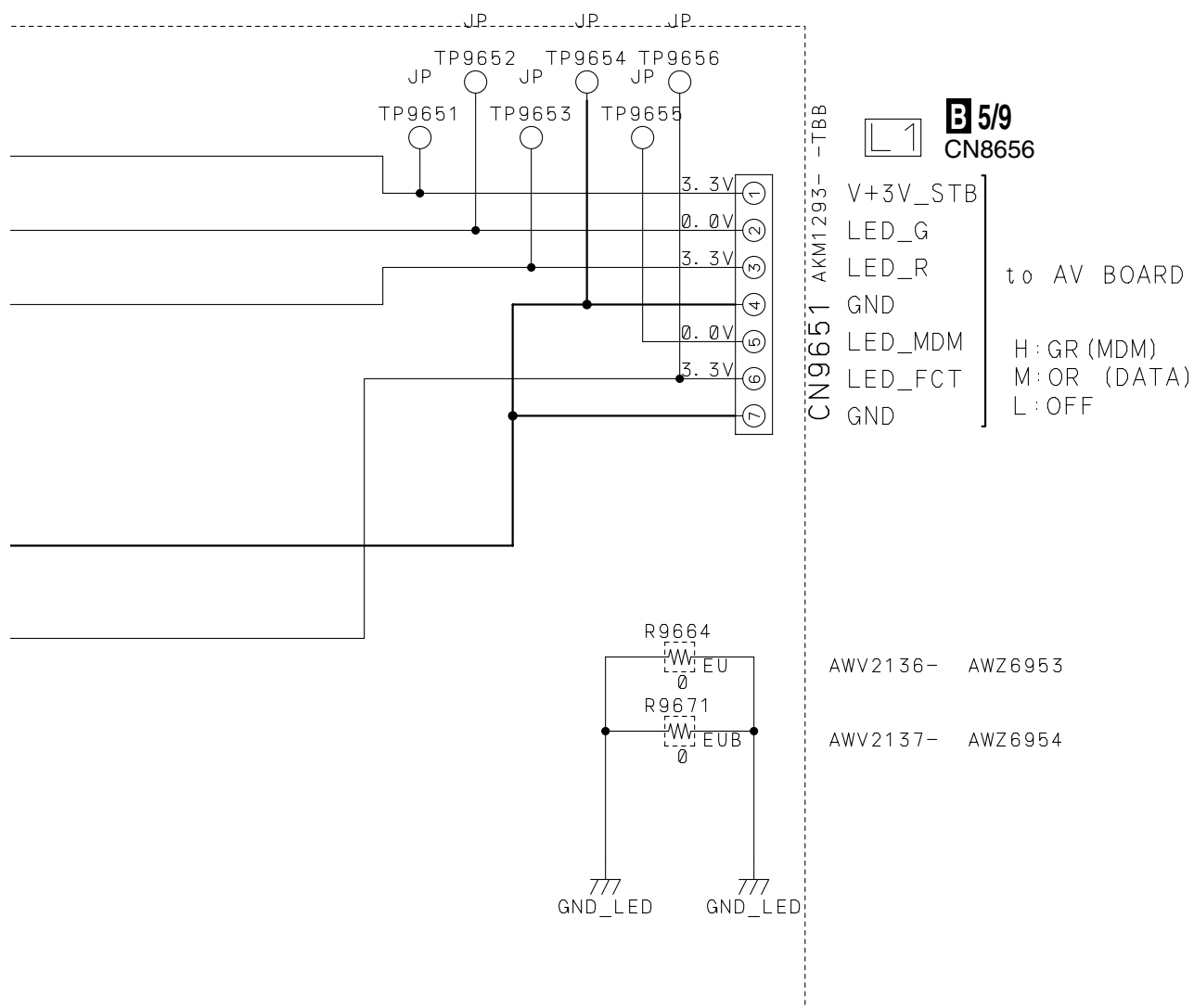
3.27 LED ASSY

H LED ASSY
(PDP-R05E, PDP-R05XE : AWZ6953)(PDP-R05FE : AWZ6954)

LED ASSY

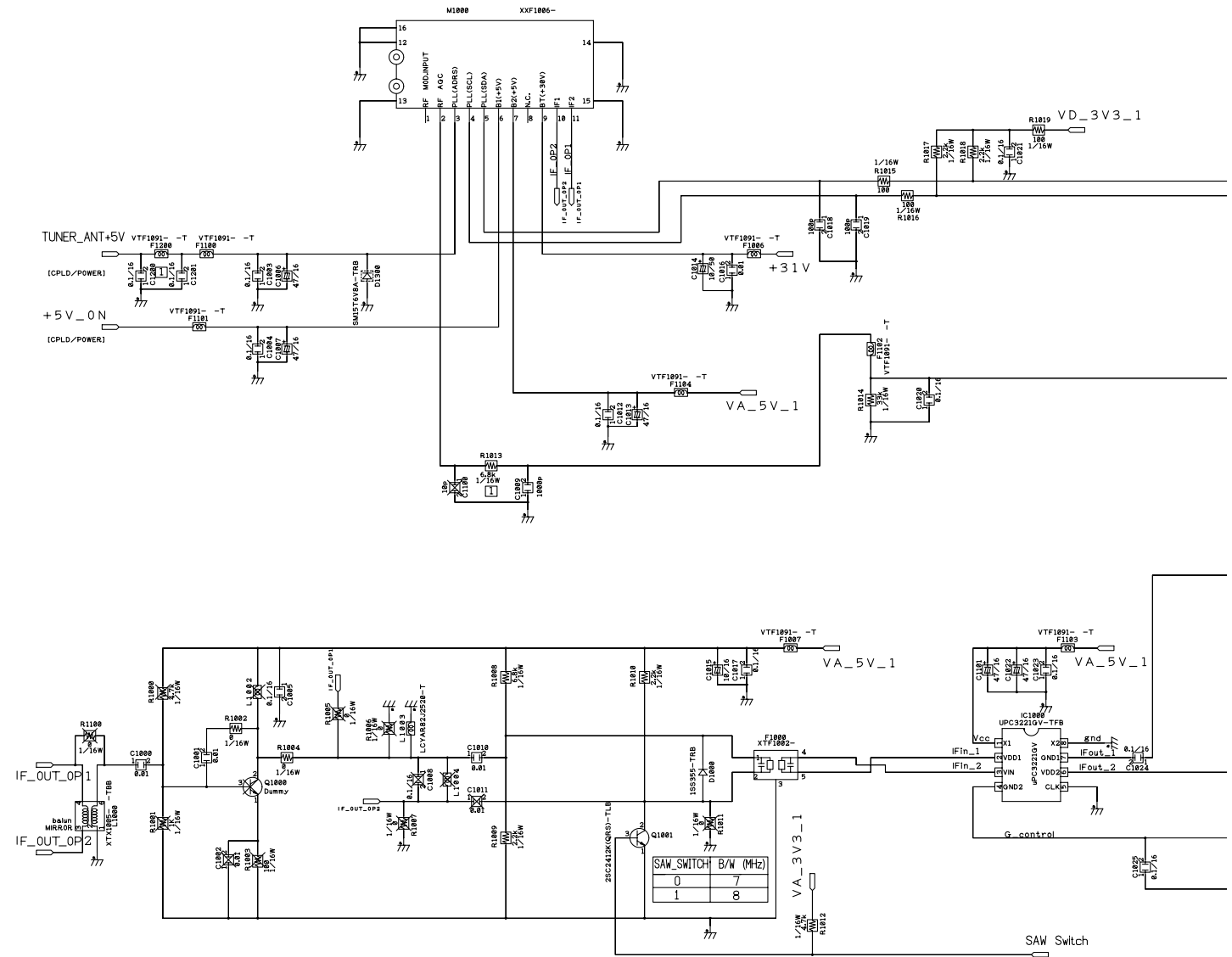


ITEM	USED	VACANT
R	9652-9671	9658-9661
C	9651, 9652	
Q	9651-9654	
D	9652-9655	
TC		
CN	9651	



3.28 TUNER BOARD ASSY (1/6)

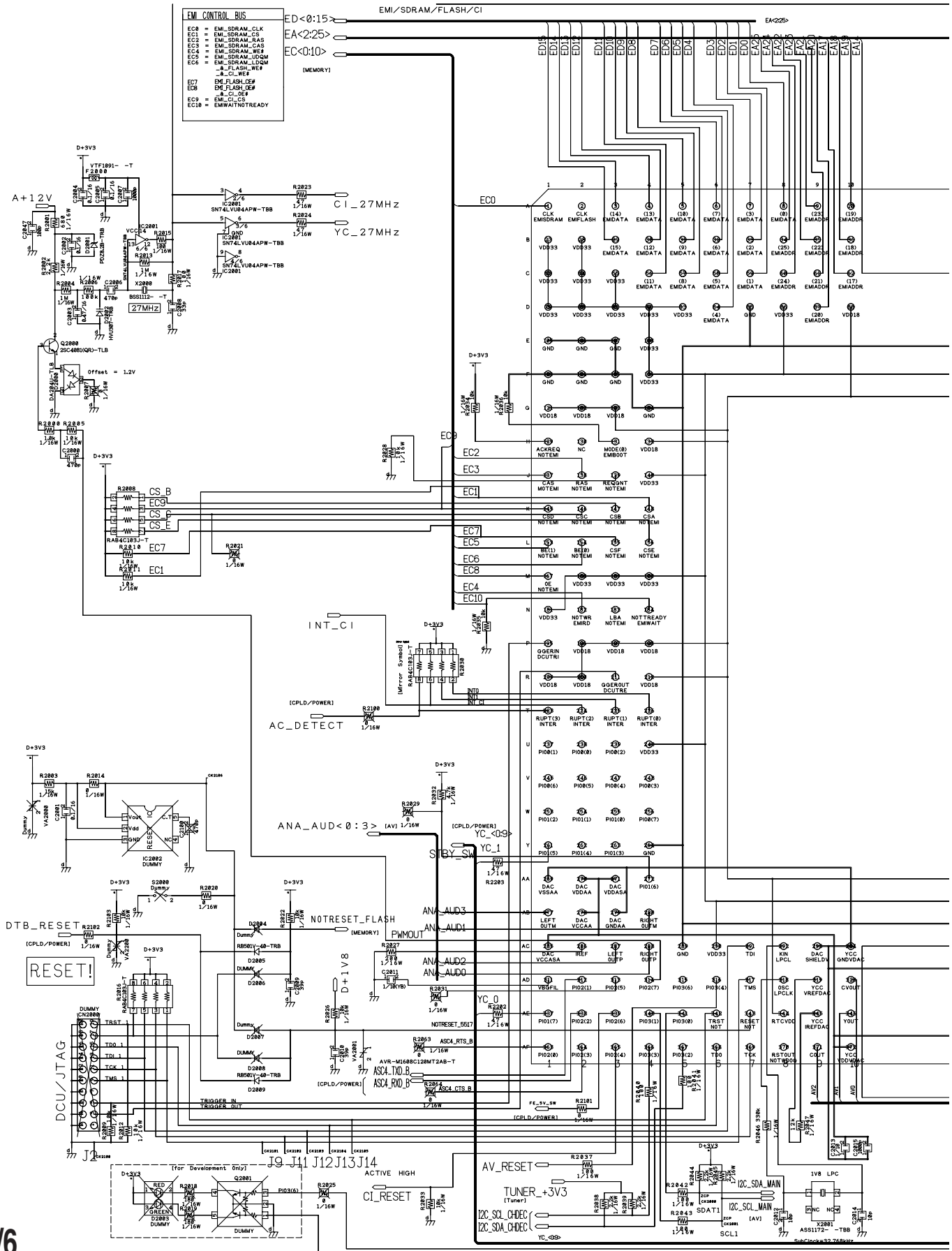
1/6 TUNER BOARD ASSY (AWE1301)

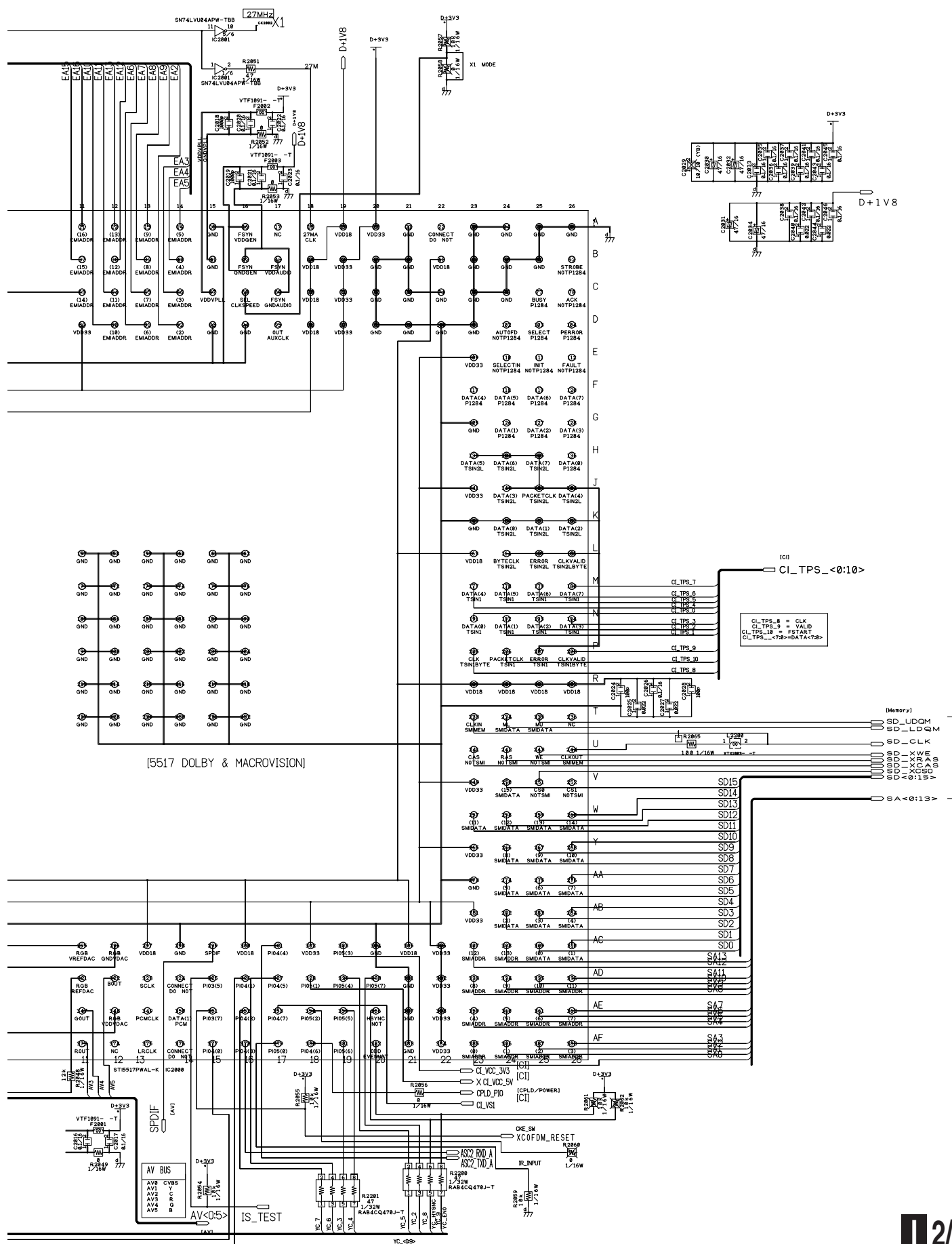




3.29 TUNER BOARD ASSY (2/6)

2/6 TUNER BOARD ASSY (AWE1301)

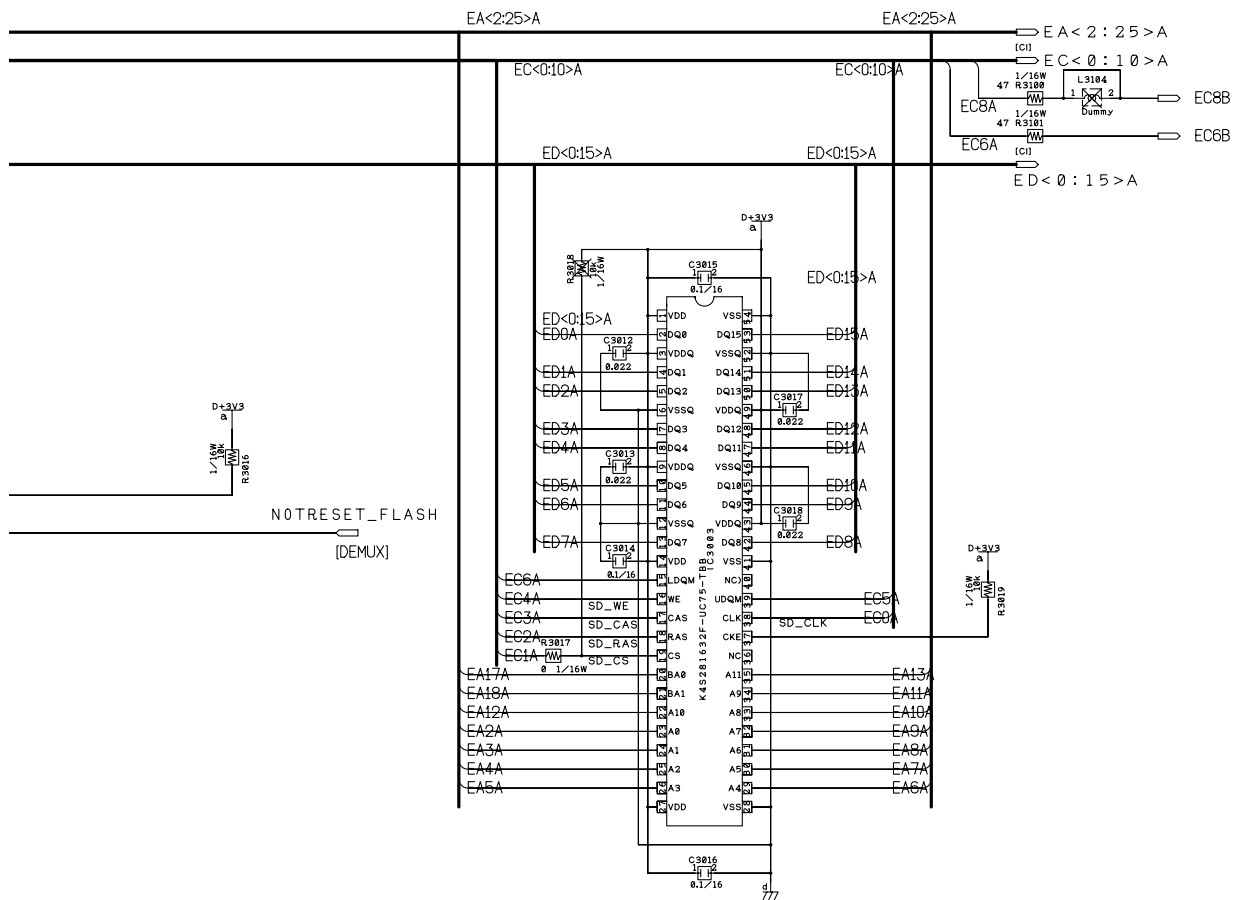




△



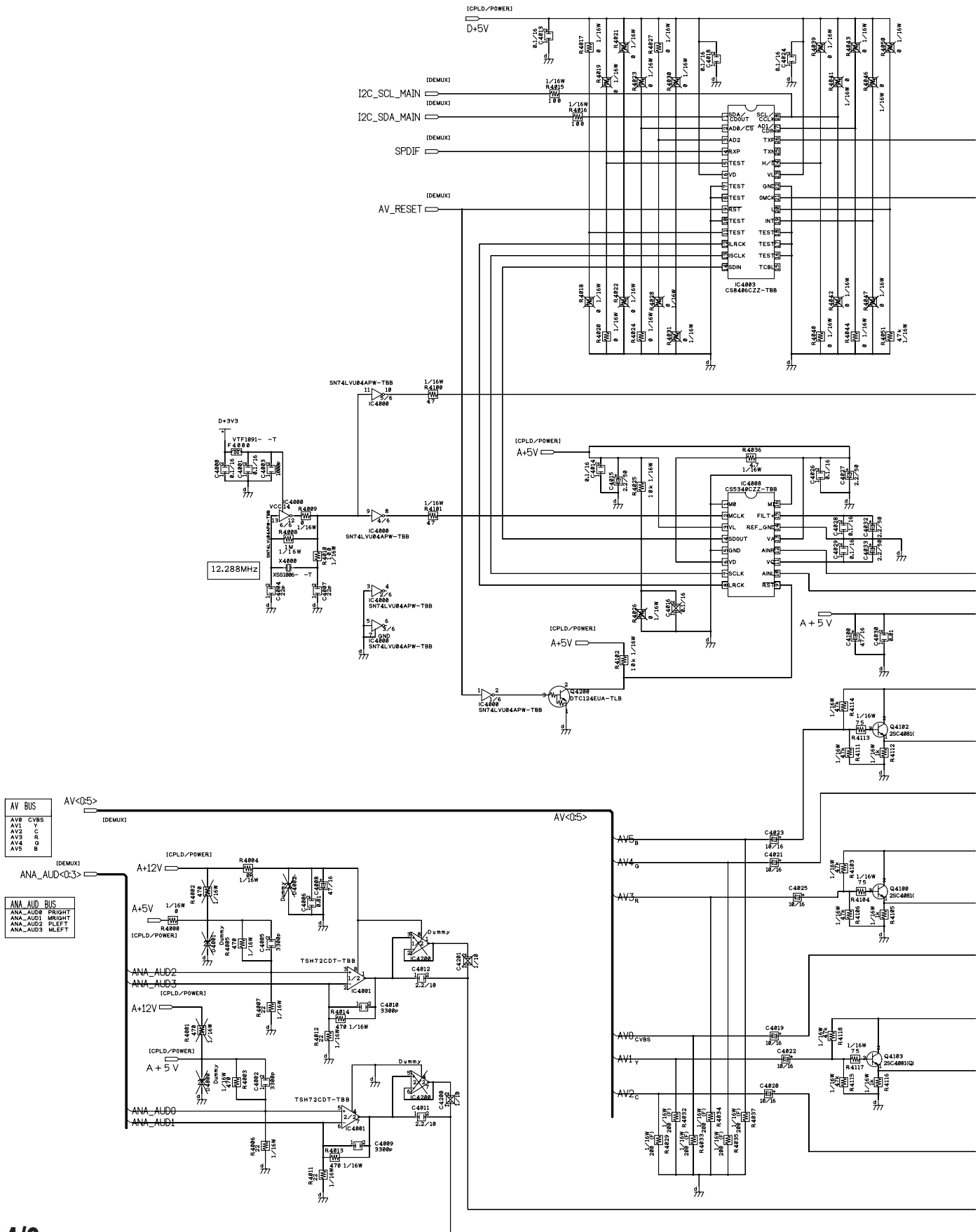
1 3/6 TUNER BOARD ASSY (AWE1301)

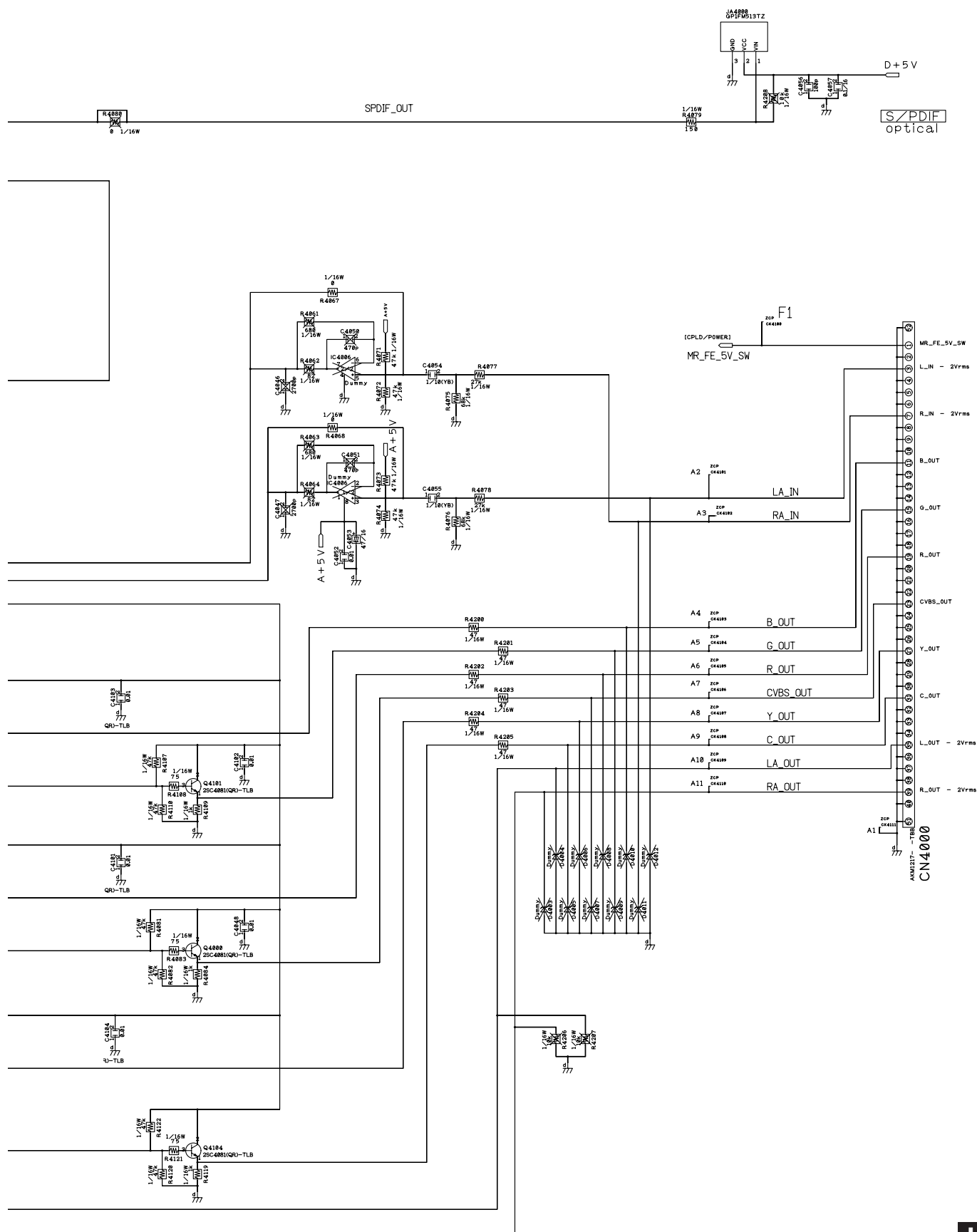


EMI
128Mbit
Bank 0

3.31 TUNER BOARD ASSY (4/6)

4/6 TUNER BOARD ASSY (AWE1301)

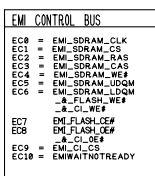




B 5/9 CN8662

AKM1217- -TBB
CN4000

I 5/6 TUNER BOARD ASSY (AWE1301)

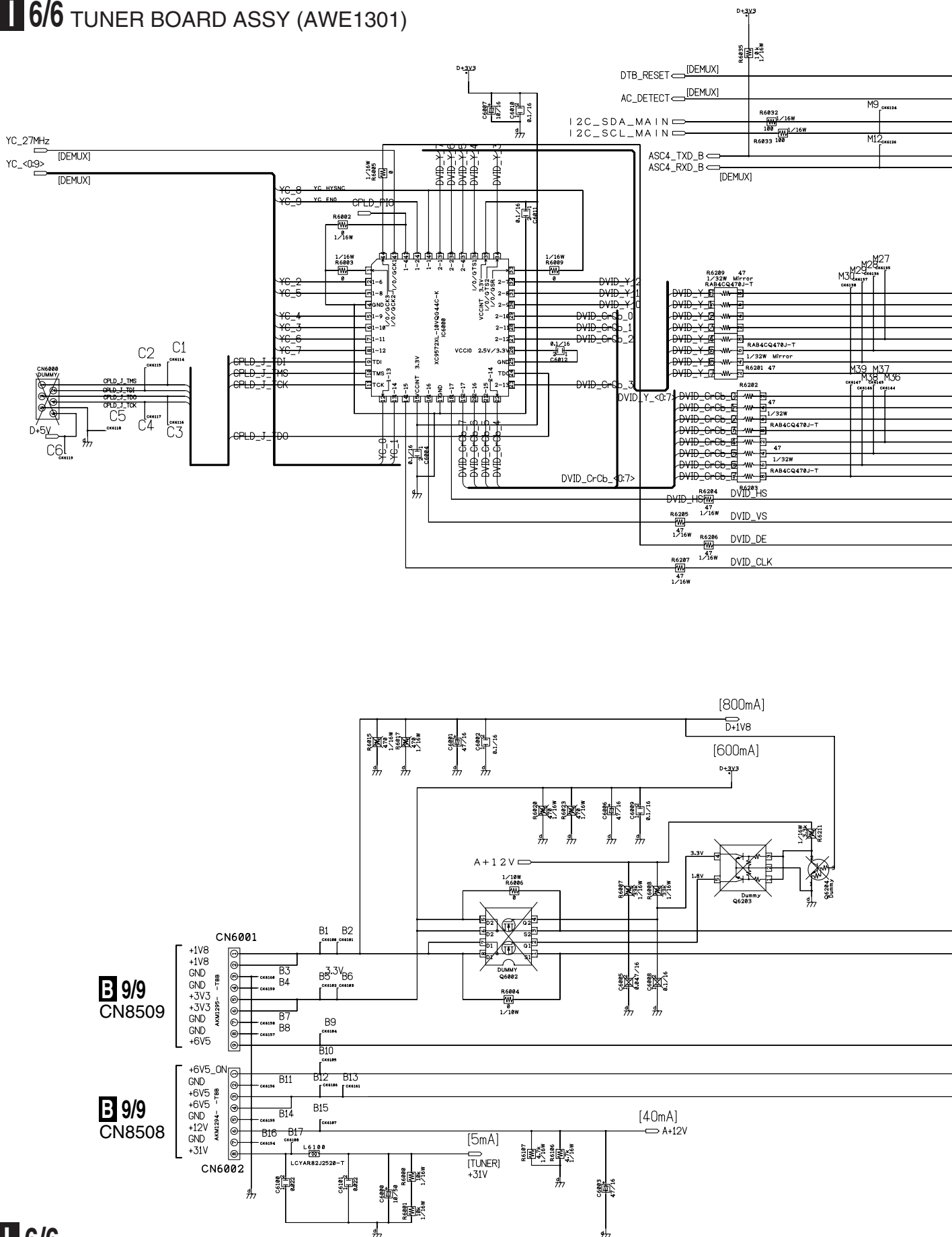


EMI
Common Interface
Bank 3

F



I 6/6

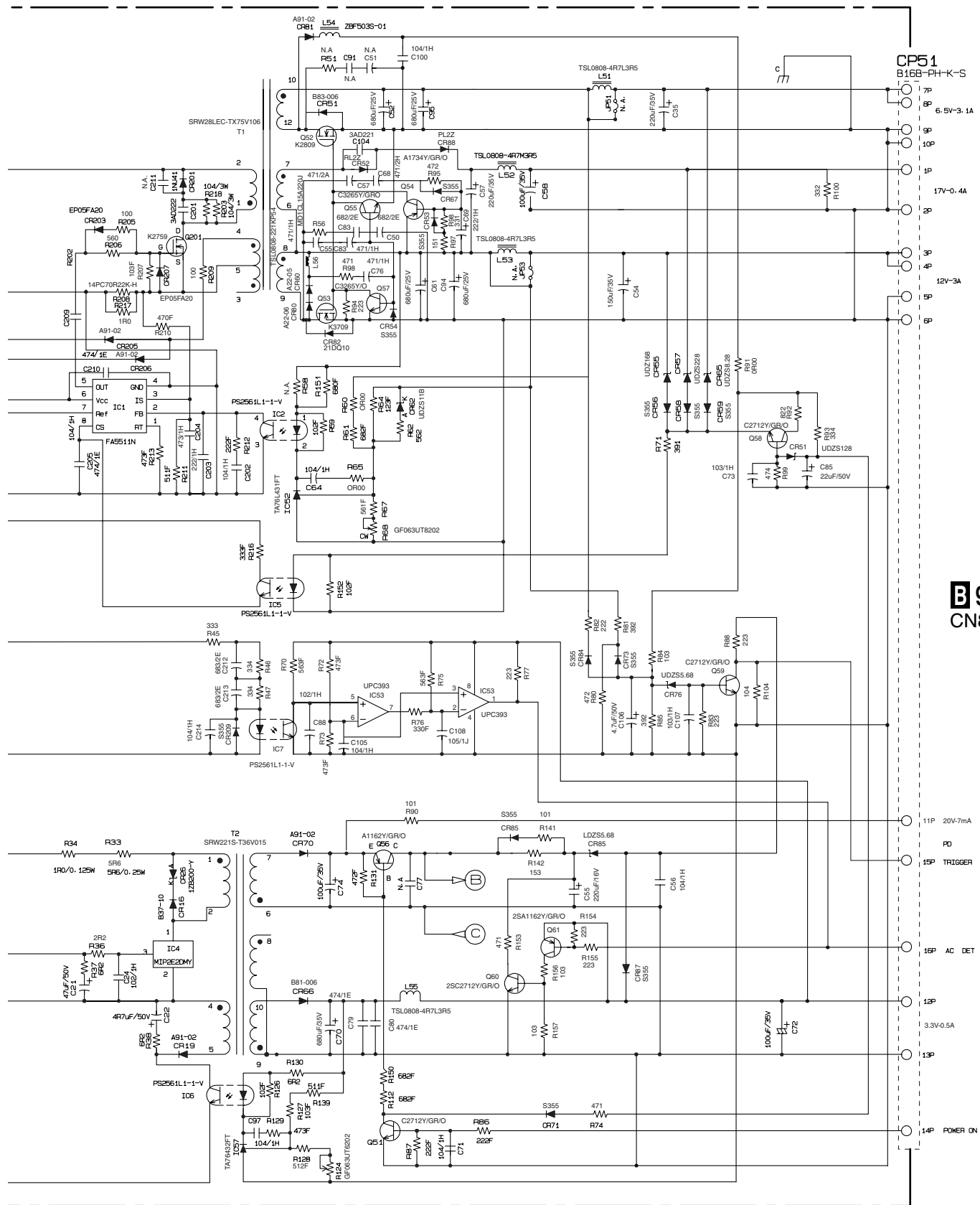




△

POWER SUPPLY UNIT (AXY1091)



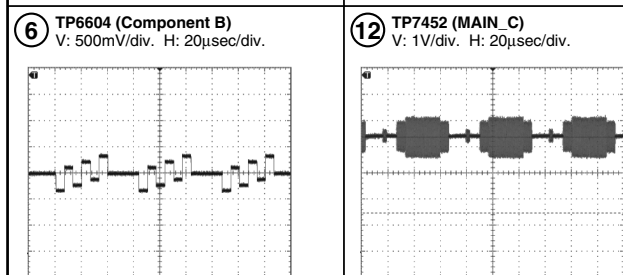
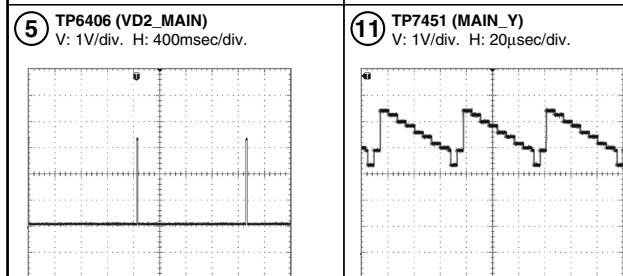
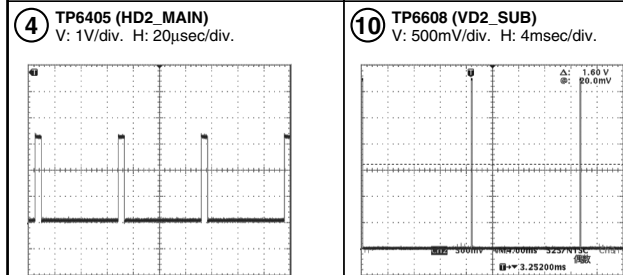
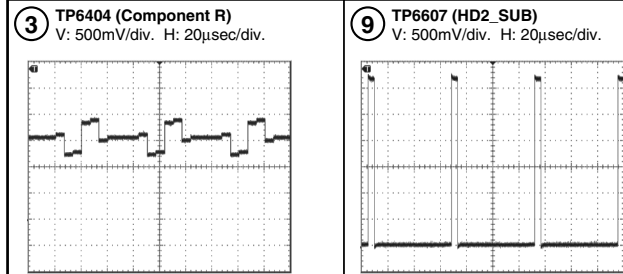
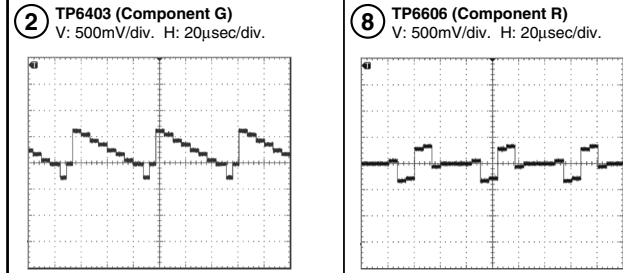
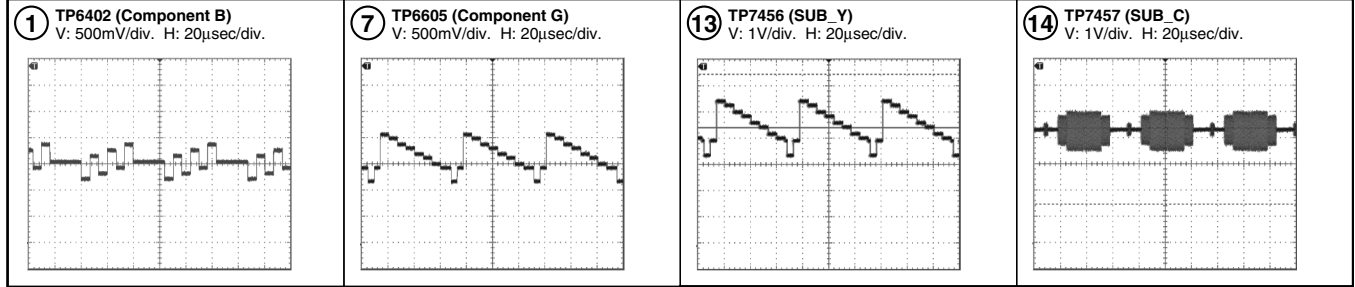


B 9/9
CN8501

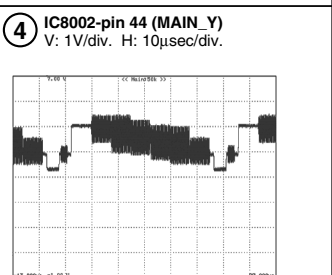
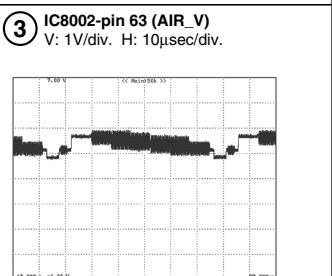
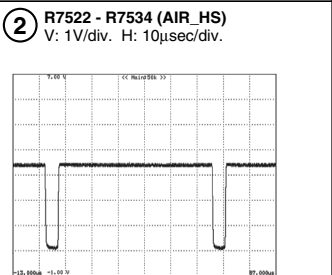
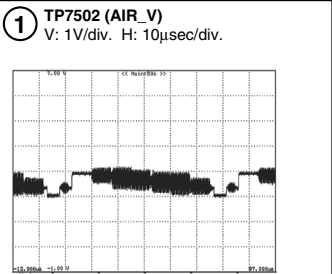
3.35 WAVEFORMS

Note : The encircled numbers denote measuring point in the schematic diagram.

A MR MAIN BOARD ASSY



B AV BOARD ASSY



3.36 VOLTAGES

B AV BOARD ASSY

CN8654 (AKM1201)		Voltage (V)	CN7455 (AKM1201)	
No.	Name		Name	No.
1	RAPID_DT_3		RAPID_DT_3	50
2	RAPID_DT_1		RAPID_DT_1	49
3	AUDIO_R	0	AUDIO_R	48
4	GND	0	GND	47
5	AUDIO_L	0	AUDIO_L	46
6	GND	0	GND	45
7	HDMI_RCH	0	HDMI_RCH	44
8	GND	0	GND	43
9	HDMI_LCH	0	HDMI_LCH	42
10	GND	0	GND	41
11	PIXEL_CLK_IN		PIXEL_CLK_IN	40
12	TTX_RGB_DIG15		TTX_RGB_DIG15	39
13	TTX_RGB_DIG14		TTX_RGB_DIG14	38
14	TTX_RGB_DIG13		TTX_RGB_DIG13	37
15	TTX_RGB_DIG12		TTX_RGB_DIG12	36
16	TTX_RGB_DIG11		TTX_RGB_DIG11	35
17	TTX_RGB_DIG10		TTX_RGB_DIG10	34
18	TTX_RGB_DIG9		TTX_RGB_DIG9	33
19	TTX_RGB_DIG8		TTX_RGB_DIG8	32
20	TTX_RGB_DIG7		TTX_RGB_DIG7	31
21	TTX_RGB_DIG6		TTX_RGB_DIG6	30
22	TTX_RGB_DIG5		TTX_RGB_DIG5	29
23	TTX_RGB_DIG4		TTX_RGB_DIG4	28
24	TTX_RGB_DIG3		TTX_RGB_DIG3	27
25	TTX_RGB_DIG2		TTX_RGB_DIG2	26
26	TTX_RGB_DIG1		TTX_RGB_DIG1	25
27	TTX_RGB_DIG0		TTX_RGB_DIG0	24
28	AIR_AFT	1.8	AIR_AFT	23
29	AIR_HS	0.5	AIR_HS	22
30	RST_IF	3.3	RST_IF	21
31	TXD_WR	3.3	TXD_WR	20
32	RXD_WR	3.3	RXD_WR	19
33	SDA_AV	5	SDA_AV	18
34	SCL_AV	5	SCL_AV	17
35	RXD_IF	3.3	RXD_IF	16
36	TXD_IF	3.3	TXD_IF	15
37	CLK_IF	3.3	CLK_IF	14
38	REQ_IF	0	REQ_IF	13
39	BUSY_IF	0	BUSY_IF	12
40	CE_IF	3.3	CE_IF	11
41	RESET_TXT	3.3	RESET_TXT	10
42	RELAY	2.4	RELAY	9
43	REM_B	3.3	REM_B	8
44	PSW1	0	PSW1	7
45	PD_MAIN	0	PD_MAIN	6
46	WE_ROM	0	WE_ROM	5
47	AM_MUTE	0	AM_MUTE	4
48	HP_VOL		HP_VOL	3
49	HP_MUTE		HP_MUTE	2
50	ELITE_DET		ELITE_DET	1

A MR MAIN BOARD ASSY

B AV BOARD ASSY

CN8651 (KM200NA15)		Voltage (V)	CN7451 (AKM1301)	
No.	Name		Name	No.
1	GND	0.0	GND	15
2	V+3V_STB	3.3	V+3V_STB	14
3	GND	0.0	GND	13
4	V+3V_UCOM	3.3	V+3V_UCOM	12
5	GND	0.0	GND	11
6	V+12V_16V	16.9	V+12V_16V	10
7	GND	0.0	GND	9
8	V+6V	6.7	V+6V	8
9	GND_D	0.0	GND_D	7
10	V+1V_DD	1.5	V+1V_DD	6
11	V+1V_DD	1.5	V+1V_DD	5
12	GND_D	0.0	GND_D	4
13	V+3V_DD	3.3	V+3V_DD	3
14	V+3V_DD	3.3	V+3V_DD	2
15	GND_D	0.0	GND_D	1

A MR MAIN BOARD ASSY

B AV BOARD ASSY

L PC CARD MODULE

CN8660 (AKM1233)		Voltage (V)	CN501	
No.	Name		Name	No.
1	RXD_CARD	3.32	RXD_CARD	12
2	TXD_CARD	3.33	TXD_CARD	11
3	NC		NC	10
4	CARD_V	3.31	CARD_V	9
5	CARD_H	3.31	CARD_H	8
6	GND	0.00	GND	7
7	GND	0.00	GND	6
8	YUVD1_B	0.51	YUVD1_B	5
9	GND	0.00	GND	4
10	YUVD1_G	0.56	YUVD1_G	3
11	GND	0.00	GND	2
12	YUVD1_R	0.52	YUVD1_R	1

B AV BOARD ASSY

L PC CARD MODULE

CN8502 (KM200NA6)		Voltage (V)	CN1	
No.	Name		Name	No.
1	V+3V_CARD	3.35	V+3V_CARD	1
2	V+3V_CARD	3.35	V+3V_CARD	2
3	GND	0.00	GND	3
4	GND	0.00	GND	4
5	V+5V_CARD	5.00	V+5V_CARD	5
6	GND	0.00	GND	6

B AV BOARD ASSY**A** MR MAIN BOARD ASSY

CN8652 (AKM1201)		Voltage (V)	CN7454 (AKM1201)	
No.	Name		Name	No.
1	AC_DET	2.7	AC_DET	50
2	KEY_B	3.3	KEY_B	49
3	STB_MT	0	STB_MT	48
4	AC_OFF	0	AC_OFF	47
5	SDA_EP2	3.3	SDA_EP2	46
6	SCL_EP2	3.3	SCL_EP2	45
7	VCC_EP	3.3	VCC_EP	44
8	SDA_HDMI/TXT		SDA_HDMI/TXT	43
9	SCL_HDMI/TXT		SCL_HDMI/TXT	42
10	WE_TXT	0	WE_TXT	41
11	RXD_CARD		RXD_CARD	40
12	TXD_CARD		TXD_CARD	39
13	DSUB_DET	0	DSUB_DET	38
14	PN2	0	PN2	37
15	VD_TXT	0	VD_TXT	36
16	HD_TXT	0	HD_TXT	35
17	PCA_V_SUB	0	PCA_V_SUB	34
18	PCA_H_SUB	0	PCA_H_SUB	33
19	PCA_V	0	PCA_V	32
20	PCA_H	0	PCA_H	31
21	BLK	0	BLK	30
22	FBLK_SUB		FBLK_SUB	29
23	FBLK_MAIN		FBLK_MAIN	28
24	GND	0	GND	27
25	SUBC_Y	4.5	SUBC_Y	26
26	GND	0	GND	25
27	SUBC_PR	4.5	SUBC_PR	24
28	GND	0	GND	23
29	SUBC_PB	4.5	SUBC_PB	22
30	GND	0	GND	21
31	SUB_C	4.3	SUB_C	20
32	GND	0	GND	19
33	SUB_Y	3.7	SUB_Y	18
34	GND	0	GND	17
35	G_CCTXT	1.3	G_CCTXT	16
36	GND	0	GND	15
37	R_CCTXT	1.3	R_CCTXT	14
38	GND	0	GND	13
39	B_CCTXT	1.3	B_CCTXT	12
40	GND	0	GND	11
41	MAINC_Y	4.5	MAINC_Y	10
42	GND	0	GND	9
43	MAINC_PR	4.5	MAINC_PR	8
44	GND	0	GND	7
45	MAINC_PB	4.5	MAINC_PB	6
46	GND	0	GND	5
47	MAIN_C	4.4	MAIN_C	4
48	GND	0	GND	3
49	MAIN_Y	4.4	MAIN_Y	2
50	GND	0	GND	1

I TUNER BOARD ASSY**A** MR MAIN BOARD ASSY

CN6003 (AKM1236)		Voltage (V)	CN6951 (AKM1201)	
No.	Name		Name	No.
1	GND	0	GND	50
2	N.C.	—	N.C.	49
3	N.C.	—	N.C.	48
4	RESET	3.37	RST_DT	47
5	DTB_DET	0	DT_DET	46
6	AC_DETECT		AC_DETECT	45
7	GND	0	GND	44
8	SDA_MAIN		SDA_MAIN	43
9	SCL_MAIN		SCL_MAIN	42
10	GND	0	GND	41
11	TXDA	3.3	RXDA	40
12	RXDA	3.3	TXDA	39
13	N.C.	—	N.C.	38
14	N.C.	—	N.C.	37
15	N.C.	—	N.C.	36
16	N.C.	—	N.C.	35
17	N.C.	—	N.C.	34
18	N.C.	—	N.C.	33
19	N.C.	—	N.C.	32
20	N.C.	—	N.C.	31
21	N.C.	—	N.C.	30
22	GND	0	GND	29
23	DVID_Y0	0/3.3	DVID_Y0	28
24	DVID_Y1	0/3.3	DVID_Y1	27
25	DVID_Y2	0/3.3	DVID_Y2	26
26	DVID_Y3	0/3.3	DVID_Y3	25
27	DVID_Y4	0/3.3	DVID_Y4	24
28	DVID_Y5	0/3.3	DVID_Y5	23
29	DVID_Y6	0/3.3	DVID_Y6	22
30	DVID_Y7	0/3.3	DVID_Y7	21
31	GND	0	GND	20
32	DVID_PbPr0	0/3.3	DVID_PbPr0	19
33	DVID_PbPr1	0/3.3	DVID_PbPr1	18
34	DVID_PbPr2	0/3.3	DVID_PbPr2	17
35	DVID_PbPr3	0/3.3	DVID_PbPr3	16
36	DVID_PbPr4	0/3.3	DVID_PbPr4	15
37	DVID_PbPr5	0/3.3	DVID_PbPr5	14
38	DVID_PbPr6	0/3.3	DVID_PbPr6	13
39	DVID_PbPr7	0/3.3	DVID_PbPr7	12
40	GND	0	GND	11
41	DVID_HS	3.1	DVID_HS	10
42	GND	0	GND	9
43	DVID_VS	3.2	DVID_VS	8
44	GND	0	GND	7
45	DVID_DE	2.6	DVID_DE	6
46	GND	0	GND	5
47	DVID_CLK	1.6	DVID_CLK	4
48	GND	0	GND	3
49	SPDIF		SPDIF	2
50	GND	0	GND	1

A MR MAIN BOARD ASSY

FAN MOTOR

CN7202 , CN7204 (AKM1274)		Voltage (V)	CN6951 (AKM1201)	
No.	Name		Name	No.
1	FAN_12V	6.9		
2	FAN_NG	0		
3	GND	0		

B AV BOARD ASSY**H** LED ASSY

CN8656 (KM200NA7)		Voltage (V)	CN7651 (AKM1293-A-TBB)	
No.	Name		Name	No.
1	V+3V_STB	3.3	V+3V_STB	1
2	LED_G	0	LED_G	2
3	LED_R	3.3	LED_R	3
4	GND	0	GND	4
5	LED_MDM	0	LED_MDM	5
6	LED_FCT	3.3	LED_FCT	6
7	GND	0.0	GND	7

B AV BOARD ASSY**I** TUNER BOARD ASSY

CN8509 (KM200NA9)		Voltage (V)	CN6001 (KM200NA9)	
No.	Name		Name	No.
1	V+1.8V_DD	1.8	V+1.8V_DD	1
2	V+1.8V_DD	1.8	V+1.8V_DD	2
3	GND	0	GND	3
4	GND	0	GND	4
5	V+3V_DD	3	V+3V_DD	5
6	V+3V_DD	3	V+3V_DD	6
7	GND	0	GND	7
8	GND	0	GND	8
9	V+6V_EU	6	V+6V_EU	9

B AV BOARD ASSY**K** POWER SUPPLY UNIT

CN8501 (KM200NA16)		Voltage (V)	CP51 (KM200NA16)	
No.	Name		Name	No.
1	V+16.5V	17.6	V+16.5V	1
2	GND	0	GND	2
3	V+12V	12	V+12V	3
4	V+12V	12	V+12V	4
5	GND	0	GND	5
6	GND	0	GND	6
7	V+6.5V	6.8	V+6.5V	7
8	V+6.5V	6.8	V+6.5V	8
9	GND	0	GND	9
10	GND	0	GND	10
11	V+12V_STB	14.9	V+12V_STB	11
12	V+3V_STB	3.3	V+3V_STB	12
13	GND	0	GND	13
14	RELAY	2.4	RELAY	14
15	PD_TRIGGER	0	PD_TRIGGER	15
16	AC_DET	2.7	AC_DET	16

B AV BOARD ASSY**I** TUNER BOARD ASSY

CN8508 (KM200NA8)		Voltage (V)	CN6002 (KM200NA8)	
No.	Name		Name	No.
1	V+6V_ON	6	V+6V_ON	1
2	GND	0	GND	2
3	V+6V	6	V+6V	3
4	V+6V	6	V+6V	4
5	GND	0	GND	5
6	V+12V	12	V+12V	6
7	GND	0	GND	7
8	V+30V_EU	30	V+30V_EU	8

B AV BOARD ASSY**F** SR ASSY

CN8658 (AKM1233)		Voltage (V)	CN9452 (CKS3826)	
No.	Name		Name	No.
1	V+5V_STB	5.0	V+5V_STB	12
2	V+3V_STB	3.3	V+3V_STB	11
3	TXD	3.3	TXD	10
4	RXD	3.3	RXD	9
5	232C_DET	0.0	232C_DET	8
6	SR_EN_B	3.3	SR_EN_B	7
7	GND	0.0	GND	6
8	SR_OUT	3.3	SR_OUT	5
9	SR_IN	3.3	SR_IN	4
10	GND	0.0	GND	3
11	IR	0.0	IR	2
12	GND	0.0	GND	1

A MR MAIN BOARD ASSY**E** MDR ASSY

CN7402 (AKM1234)		Voltage (V)	CN9302 (CKS3830)	
No.	Name		Name	No.
16	GND_D	0	GND_D	1
15	AUDIO_L	0	AUDIO_L	2
14	ACT3V	3.3	ACT3V	3
13	AUDIO_R	0	AUDIO_R	4
12	V+3V_UCOM	3.3	V+3V_UCOM	5
11	STB3V	3.3	STB3V	6
10	SP_MUTE	3.3	SP_MUTE	7
9	MTXD	3.3	MTXD	8
8	FIELD	0	FIELD	9
7	MRXD	3.3	MRXD	10
6	REM_B	3.3	REM_B	11
5	P_ST_B	0	P_ST_B	12
4	AC_OFF	0	AC_OFF	13
3	REQ	0	REQ	14
2	KEY_B	3.3	KEY_B	15
1	STB_MT	0	STB_MT	16

A MR MAIN BOARD ASSY

TRAP SW

CN7203 (AKM1213)		Voltage (V)		
No.	Name		Name	No.
1	TRAP_SW	0.7		
2	NC			
3	V+3V_UCOM	3.3		

B AV BOARD ASSY**G** FRONT ASSY

CN8653 (AKM1201)		Voltage (V)	CN9502 (AKM1201)	
No.	Name		Name	No.
50	V+9V_A	9.0	V+9V_A	1
49	V+5V_A	5.0	V+5V_A	2
48	V+3VCOM	3.3	V+3VCOM	3
47	WE_ROM	0.0	WE_ROM	4
46	PC_V	0.0	PC_V	5
45	GND	0.0	GND	6
44	PC_H	0.0	PC_H	7
43	GND	0.0	GND	8
42	PC_B	4.6	PC_B	9
41	GND	0.0	GND	10
40	PC_G	4.7	PC_G	11
39	GND	0.0	GND	12
38	PC_R	4.7	PC_R	13
37	GND	0.0	GND	14
36	GND	4.7	GND	15
35	PC_RCH	4.4	PC_RCH	16
34	GND	0.0	GND	17
33	PC_LCH	4.4	PC_LCH	18
32	GND	0.0	GND	19
31	V4_R	4.4	V4_R	20
30	GND	0.0	GND	21
29	V4_L	4.4	V4_L	22
28	GND	0.0	GND	23
27	GND	0.0	GND	24
26	V4_V	3.9	V4_V	25
25	GND	0.0	GND	26
24	V4_S2	0.1	V4_S2	27
23	V4_SPLUG	4.9	V4_SPLUG	28
22	GND	0.0	GND	29
21	V4_C	4.4	V4_C	30
20	GND	0.0	GND	31
19	V4_Y	3.9	V4_Y	32
18	GND	0.0	GND	33
17	GND	0.0	GND	34
16	HP_PLUG	0.0	HP_PLUG	35
15	HP_R	2.1	HP_R	36
14	GND	0.0	GND	37
13	HP_L	2.1	HP_L	38
12	GND	0.0	GND	39
11	GND	0.0	GND	40
10	NO_USE	—	NO_USE	41
9	GND	0.0	GND	42
8	GND	0.0	GND	43
7	NO_USE	—	NO_USE	44
6	GND	0.0	GND	45
5	GND	0.0	GND	46
4	NO_USE	—	NO_USE	47
3	GND	0.0	GND	48
2	GND	0.0	GND	49
1	NO_USE	—	NO_USE	50

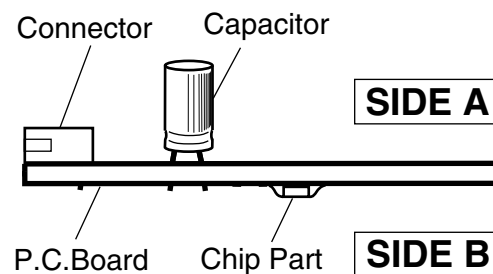
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

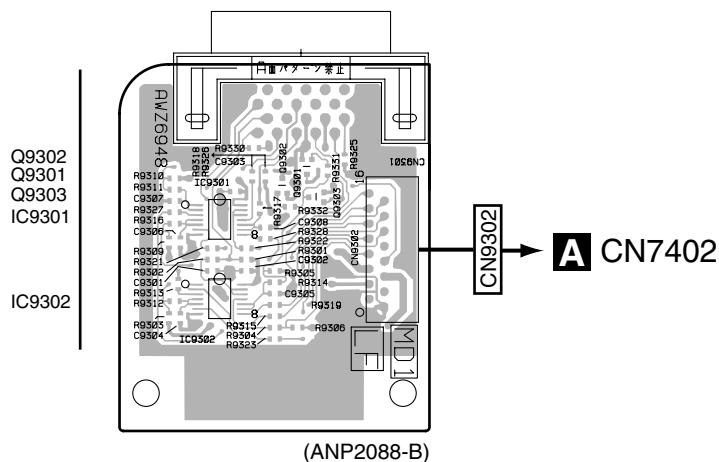
3. The parts mounted on this PCB include all necessary parts for several destinations.
- For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



4.1 SW and MDR ASSYS

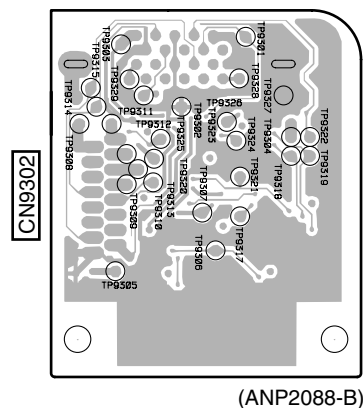
SIDE A

E MDR ASSY

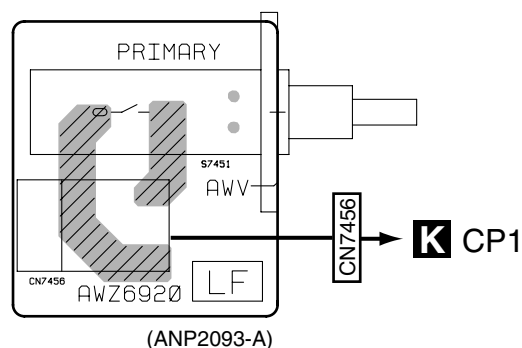


SIDE B

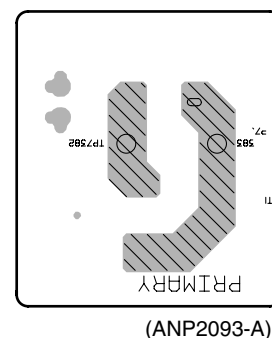
E MDR ASSY



J SW ASSY



J SW ASSY



E J

E J

A

E

C

□

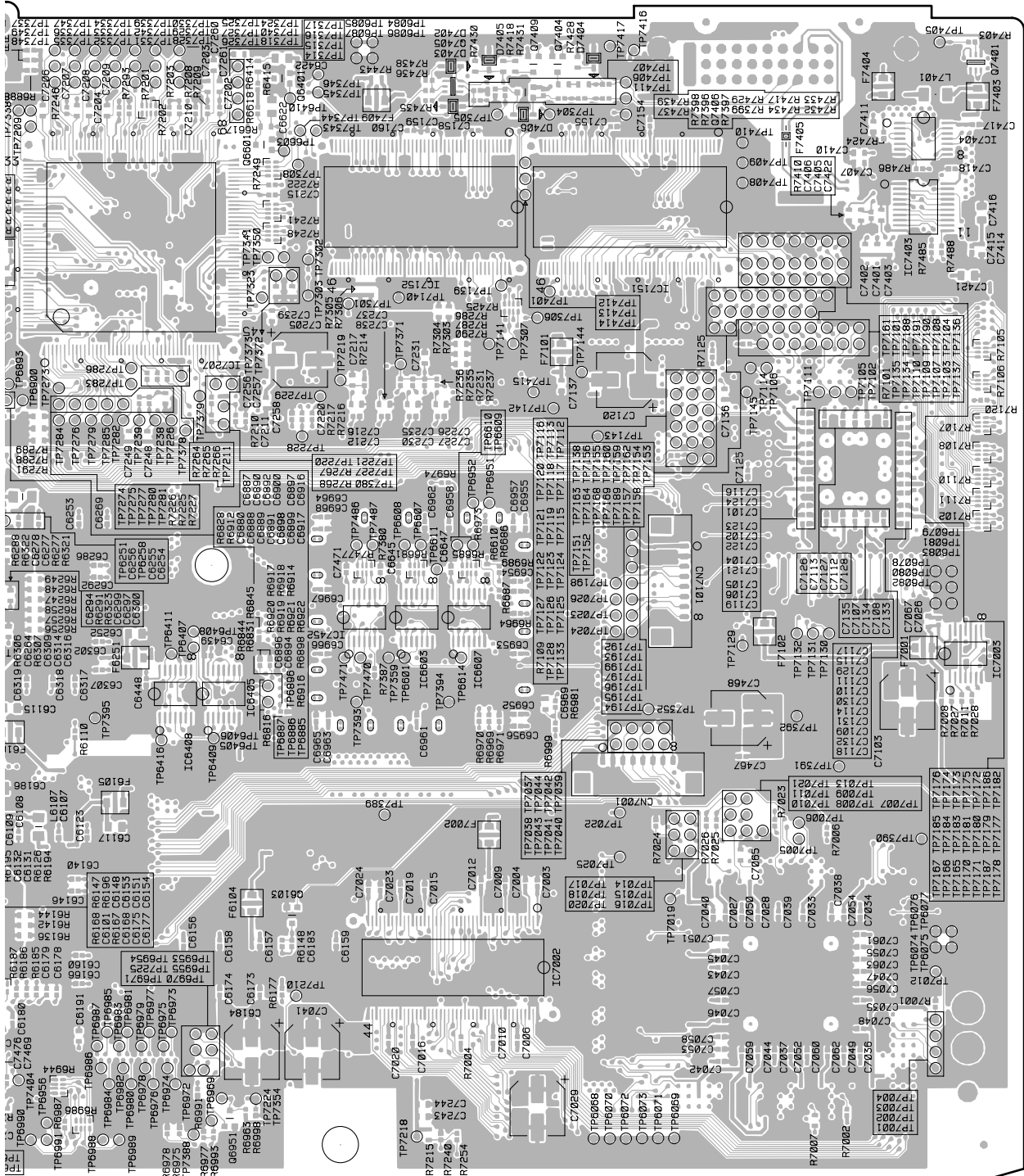
E

F



Q6108	Q7451	Q6880	Q6251	IC7458	Q6106	IC6001	Q6001	Q6005	IC7455	IC7209	IC7211
C6107	IC7451	IC6880	Q6252	Q6101	Q6107		Q6006	IC6601	IC7454	IC6803	
	IC6881		Q6881	Q6257	IC6602	Q6102	Q6007	IC6401	IC7453		
			IC6801	Q6256	Q6802	IC6402	IC6802				
			Q6801	Q6806	IC6804						

A



(ANP2093-A)

IC6408 Q6103
IC6405 IC7452
IC7207 Q6601 Q6401

IC6603 IC6607 IC7002
IC7151 Q7406
Q7405 Q7409 Q7404

IC7403 IC7003
IC7404
Q7401

4.3 AV BOARD and SR ASSY

SIDE A

B AV BOARD ASSY

A CN7454

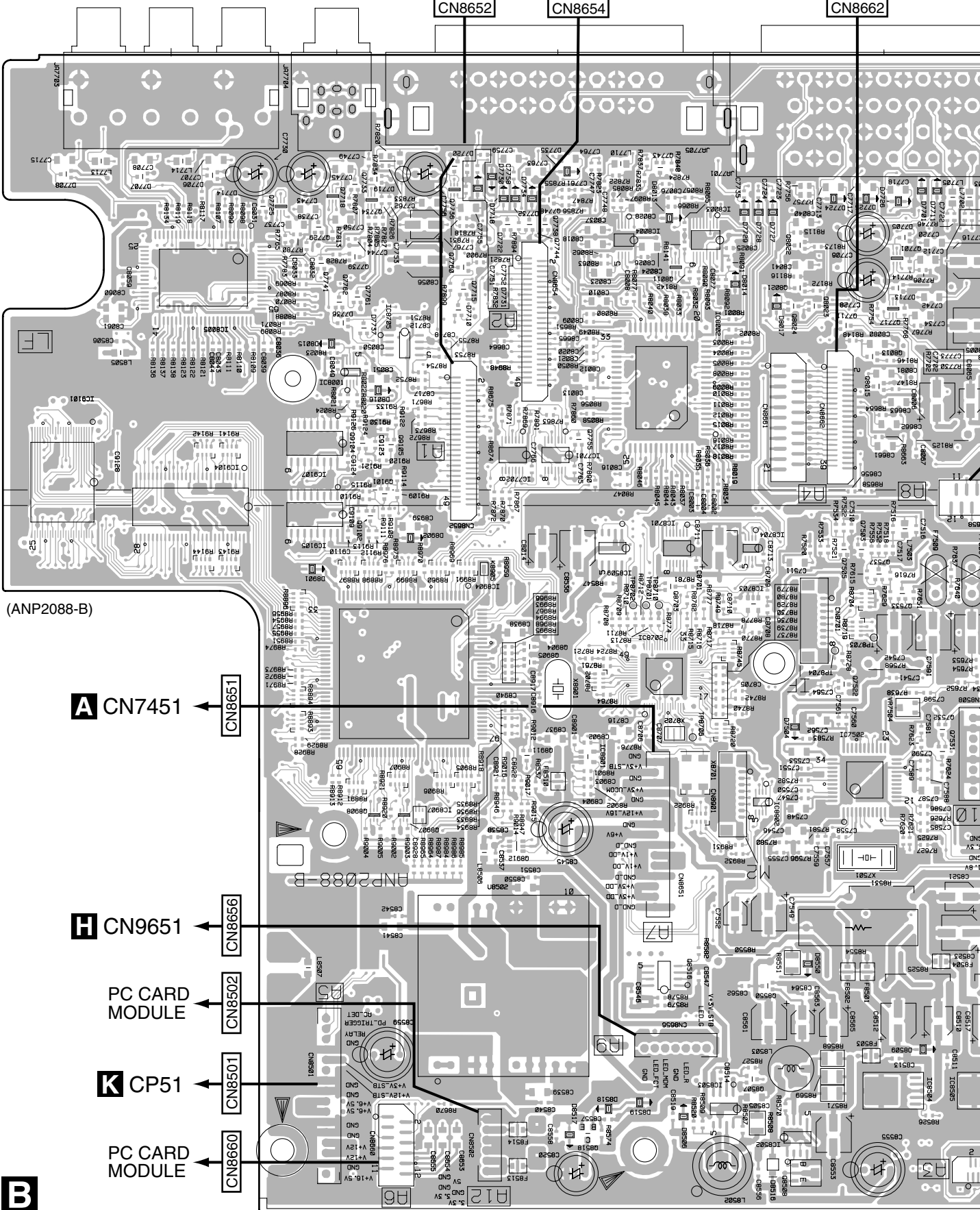
A CN7455

I CN4000

CN8652

CN8654

CN8662



(ANP2088-B)

A CN7451

CN8651

H CN9651

CN8656

PC CARD
MODULE

CN8502

K CP51

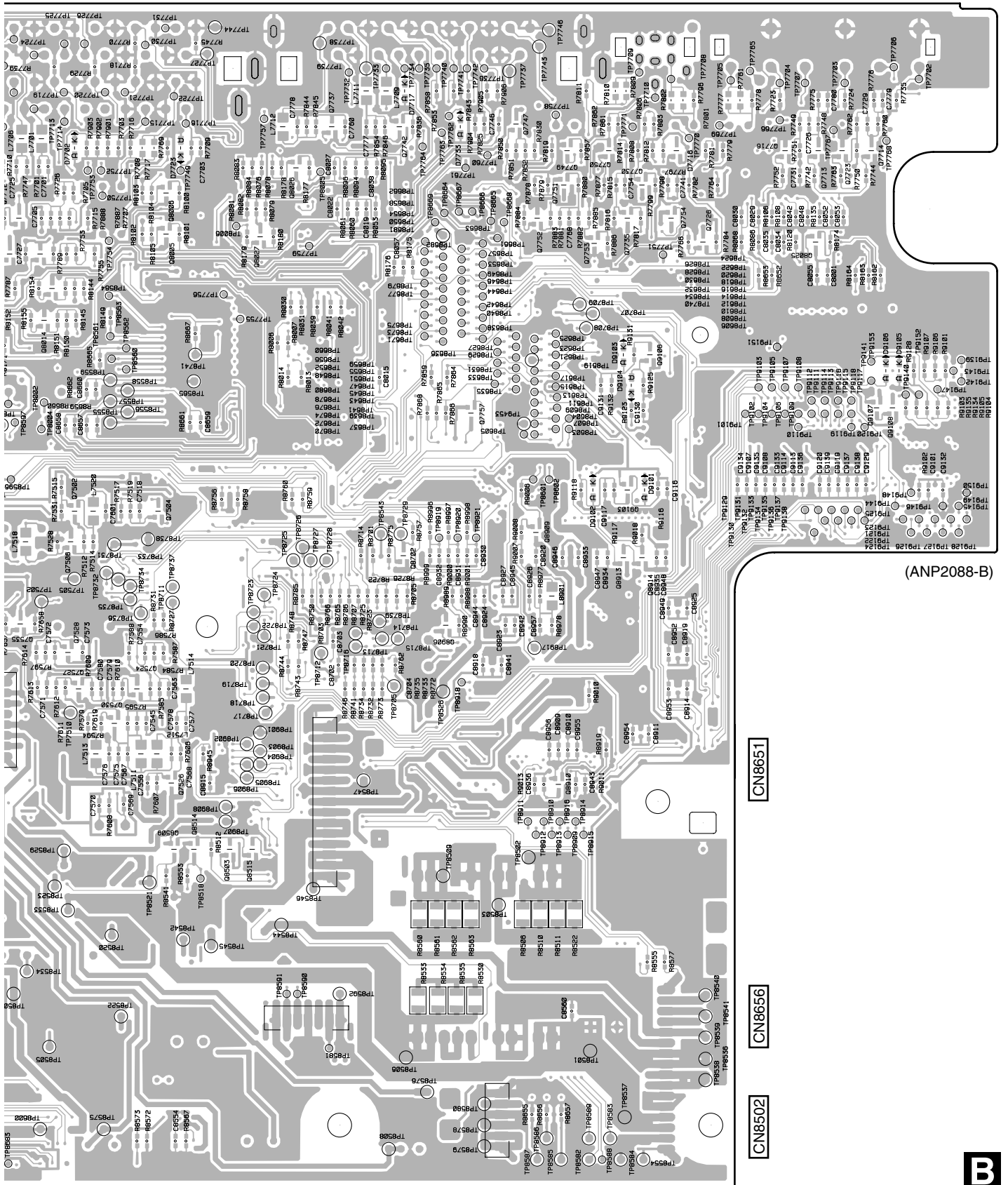
CN8501

PC CARD
MODULE

CN8660

B

PDP-R05E



△

SIDE A

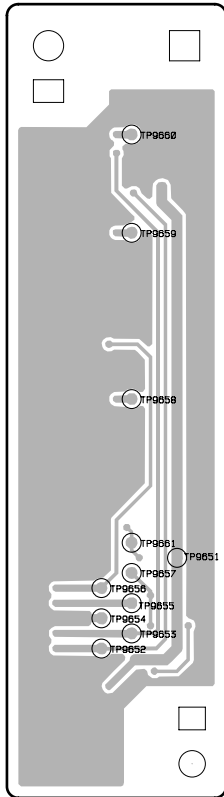
B CN8656

SIDE B

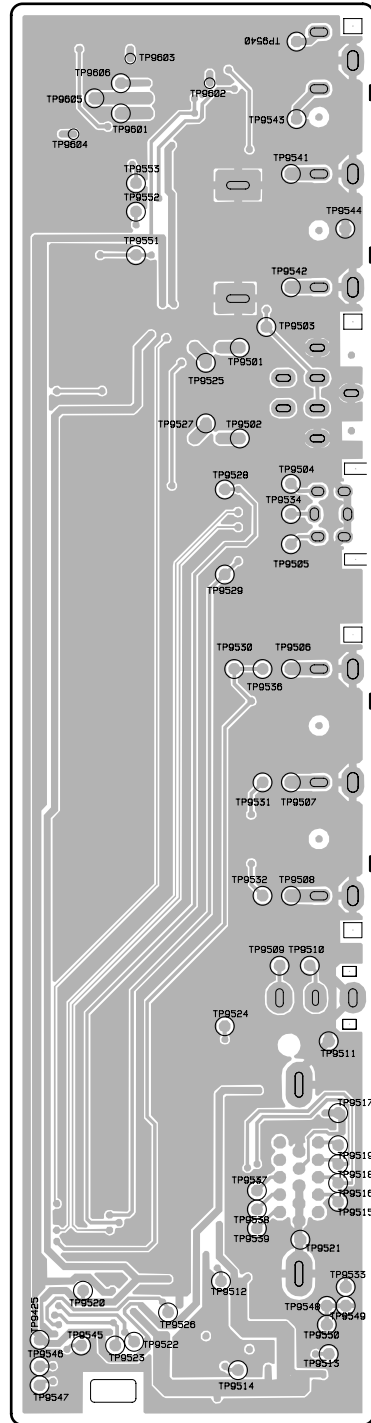
SIDE B

H LED ASSY

G FRONT ASSY



(ANP2083-A)



(ANP2083-A)

G H

G H

SIDE A

A

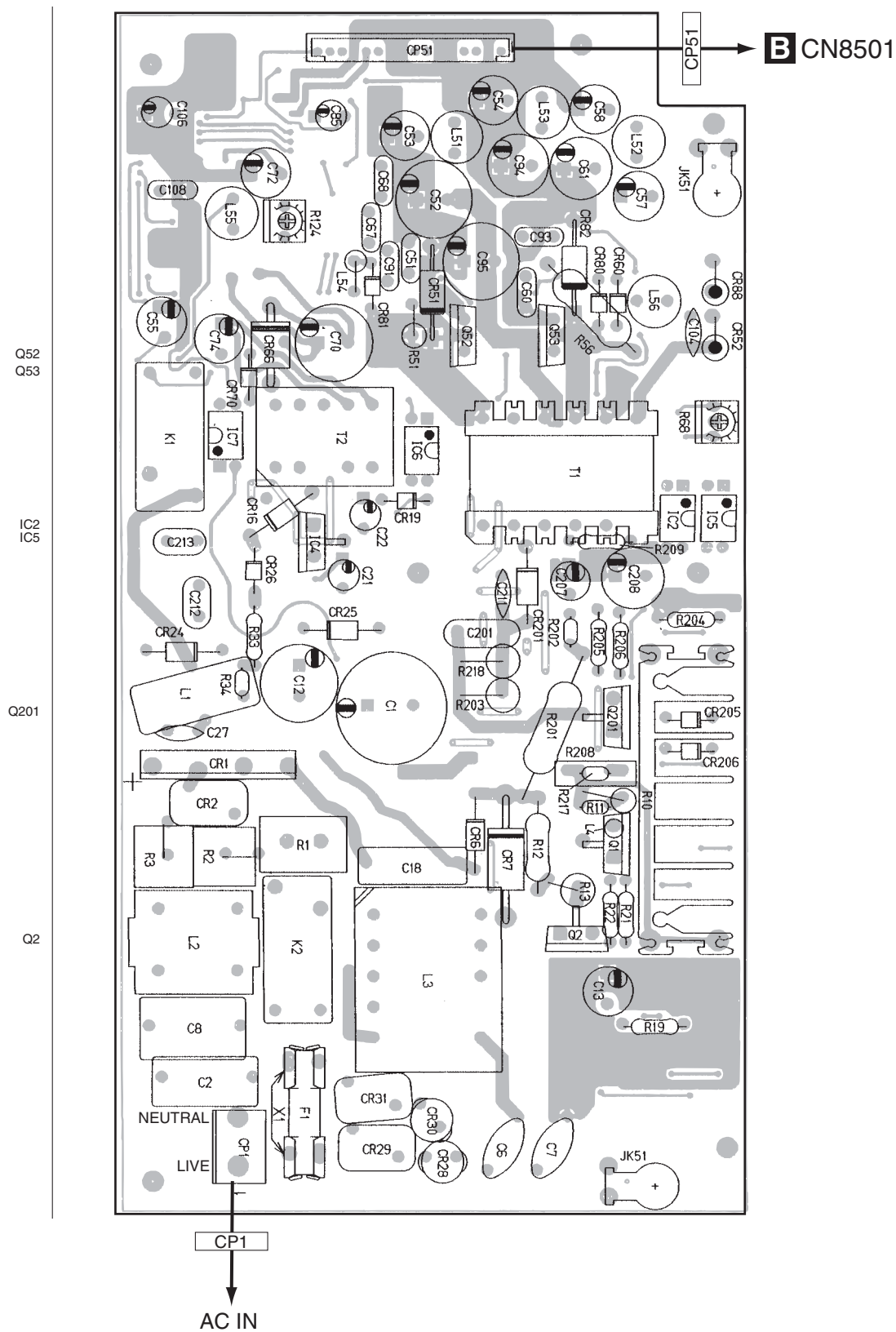
F

4.6 POWER SUPPLY UNIT

SIDE A

K POWER SUPPLY UNIT

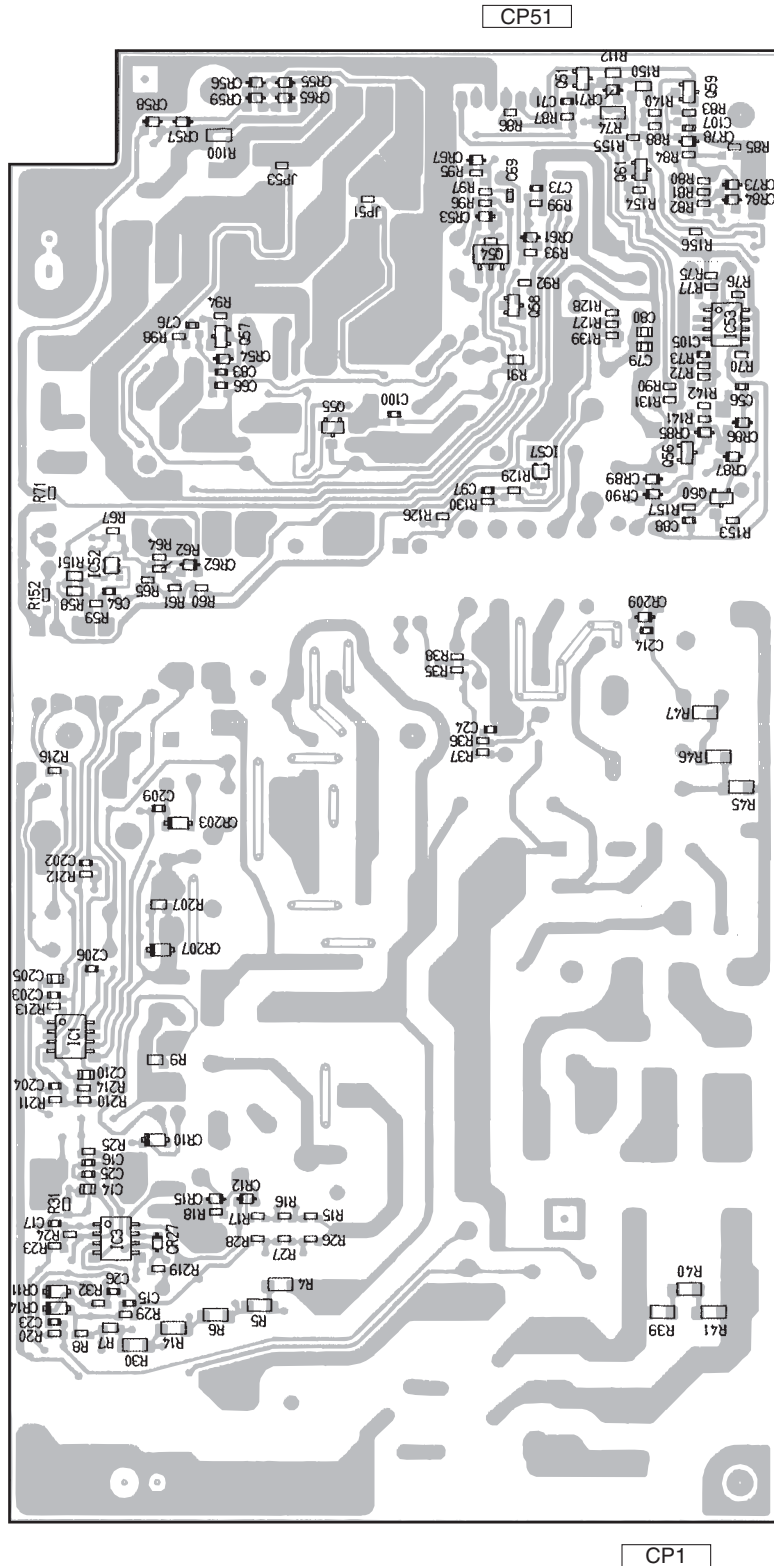
SIDE A



SIDE B

K POWER SUPPLY UNIT

SIDE B



Q51
Q59

Q61

Q54

Q58
IC53
Q57

Q55
IC57
Q56
Q60

IC52

IC1

IC3

K

PDP-R05E

K

113

A

B

C

E

F

5	6	7	8	
Mark No.	Description	Part No.	Mark No.	Description
R6136,R6137,R6142-R6145 R6194-R6196 R6115,R6131	RS1/16S0R0J RS1/16S1000F RS1/16S100J	RS1/16S103J RS1/16S1301F RS1/16S183J RS1/16S221J RS1/16S2701F	R6329-R6331 R6256-R6261 R6321-R6323 R6266,R6283	RAB4CQ103J RS1/16S0R0J RS1/16S1000F RS1/16S100J
R6197,R6207 R6147 R6198,R6208 R6113,R6129 R6126,R6138	RS1/16S103J RS1/16S1301F RS1/16S183J RS1/16S221J RS1/16S2701F	RS1/16S103J RS1/16S1301F RS1/16S183J RS1/16S221J RS1/16S2701F	R6326,R6336 R6291 R6327,R6337 R6264,R6281 R6277,R6288	RS1/16S103J RS1/16S1301F RS1/16S183J RS1/16S221J RS1/16S2701F
R6112,R6123,R6128,R6141,R6165 R6175 R6170,R6171,R6174,R6176 R6169,R6172,R6189 R6122,R6140	RS1/16S271J RS1/16S271J RS1/16S331J RS1/16S471J RS1/16S473J	RS1/16S271J RS1/16S271J RS1/16S331J RS1/16S471J RS1/16S473J	R6263,R6274,R6280,R6290,R6305 R6314 R6309,R6310,R6313,R6315 R6308,R6311,R6335 R6273,R6289	RS1/16S271J RS1/16S271J RS1/16S331J RS1/16S471J RS1/16S473J
R6167,R6168 Other Resistors	RS1/16S8201F RS1/16SS###J	RS1/16S8201F RS1/16SS###J	R6306,R6307 Other Resistors	RS1/16S8201F RS1/16SS###J
OTHERS			[AD MAIN BLOCK]	
X6101 CRYSTAL OSCILLATOR (27MHz)	ASS1175		SEMICONDUCTORS	
SEMICONDUCTORS			IC6402 IC6404 IC6401 IC6405,IC6408 Q6405	AD80058 BA7078AF SM5301BS TC74VHC126FT HN1B04FU
Q6104,Q6105,Q6109,Q6253-Q6255	2SA1586		Q6401	RN1303
CAPACITORS			COILS AND FILTERS	
C6266,C6267 C6149,C6187,C6189,C6322,C6323 C6325	CCSRCH470J50 CKSSYF104Z16 CKSSYF104Z16		F6401-F6404 EMI FILTER	CCG1162
RESISTORS			CAPACITORS	
R6132-R6134 Other Resistors	RAB4CQ103J RS1/16SS###J		C6422,C6441 (10/6.3) C6445 C6438 C6404,C6424 C6408,C6411,C6412,C6421,C6431	ACG7046 CCSRCH151J50 CKSRYB103K50 CKSRYB104K16 CKSRYB105K6R3
[MICHEL SUB BLOCK]			C6434,C6435 C6409,C6414,C6423 C6443 C6442 C6402	CKSRYB105K6R3 CKSRYB473K16 CKSRYB474K10 CKSRYB562K50 CKSRYB822K50
SEMICONDUCTORS			C6401 C6403,C6405-C6407,C6410,C6413 C6415-C6420,C6425-C6429 C6439,C6440,C6444,C6448	CKSRYB823K16 CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16
IC6255 Q6258 Q6251,Q6252 Q6256,Q6257	PD0278A 2SA1586 HN1A01FU HN1B04FU		RESISTORS	
COILS AND FILTERS			R6482,R6489 R6405,R6410,R6418,R6424 R6438,R6439 R6420,R6431-R6436 R6404,R6408,R6409,R6416,R6417	RAB4CQ101J RAB4CQ330J RAB4CQ330J RS1/16S0R0J RS1/16S1000F
F6251-F6254 EMI FILTER L6257 L6251-L6254	CCG1162 LCTAW220J2520 LCYC6R8K2125		R6423 R6406 R6422 R6478 R6472	RS1/16S1000F RS1/16S104J RS1/16S1101F RS1/16S153J RS1/16S221J
CAPACITORS			R6479 R6414 R6401 R6413 R6465	RS1/16S222J RS1/16S224J RS1/16S2701F RS1/16S472J RS1/16S682J
C6272,C6288,C6305,C6306 C6312,C6313 C6273,C6289 C6251,C6321 C6327	CCSRCH330J50 CCSRCH330J50 CCSRCH680J50 CEHVKW101M6R3 CEHVKW470M6R3			
C6297 C6258,C6260 C6265,C6282,C6299,C6300 C6309,C6310,C6316,C6324 C6264,C6295,C6301,C6314	CKSQYB225K10 CKSRYB102K50 CKSRYB104K16 CKSRYB104K16 CKSRYB105K6R3			
C6253-C6257,C6259,C6262 C6269-C6271,C6276-C6279 C6286,C6287,C6292-C6294,C6296 C6298,C6302-C6304,C6307,C6308 C6311,C6315,C6317-C6320,C6331	CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16			
RESISTORS				
R6251-R6254,R6271,R6275,R6276	RAB4CQ100J			

Mark No. Description

Other Resistors

Part No.

RS1/16SS###J

Mark No. Description**SEMICONDUCTORS**IC6880
IC6803
IC6881
IC6806
Q6888,Q6889BR24L02FJ-W
PCM1742KE
SII9993CTG100
TC74HC4538AFT
2SA1586**SEMICONDUCTORS**

IC6403,IC6406,IC6605

MM1389XFBE

CAPACITORSC6430,C6432,C6433,C6446,C6447
C6449-C6455,C6630,C6632,C6635
C6648-C6650
C6436,C6437,C6636CKSRYB105K6R3
CKSRYB105K6R3
CKSRYB105K6R3
CKSSYF104Z16Q6885,Q6886
Q6884,Q6887
Q6881
Q6882
Q68802SC4116
RN1303
RN1902
RN2303
SM6K2**RESISTORS**

Other Resistors

RS1/16SS###J

D6880,D6881
D6808
D6806,D6807,D6884
D68831SS302
1SS355
DAN202U
UDZS6R8(B)

[AD SUB BLOCK]

SEMICONDUCTORSIC6602
IC6604
IC6601
IC6603,IC6607
Q6605AD80058
BA7078AF
SM5301BS
TC74VHC126FT
HN1B04FU

Q6601

RN1303

COILS AND FILTERS

F6881 EMI FILTER

CCG1162

CAPACITORSC6802,C6849,C6851 (10/6.3)
C6880,C6882,C6884,C6886
C6888,C6889,C6892,C6895,C6896
C6899-C6902,C6905,C6906,C6915
C6917ACG7046
CCSRCH101J50
CCSRCH101J50
CCSRCH101J50
CCSRCH101J50**COILS AND FILTERS**

F6601-F6604 EMI FILTER

CCG1162

C6927,C6928
C6921,C6922
C6911
C6913
C6920CCSRCH221J50
CEHVKW101M6R3
CEHVKW220M6R3
CKSRYB104K16
CKSRYB473K16**CAPACITORS**C6622,C6640 (10/6.3)
C6644
C6638
C6604,C6624
C6608,C6611,C6612,C6621,C6631ACG7046
CCSRCH151J50
CKSRYB103K50
CKSRYB104K16
CKSRYB105K6R3C6633,C6634
C6609,C6614,C6623
C6642
C6641
C6602CKSRYB105K6R3
CKSRYB473K16
CKSRYB474K10
CKSRYB562K50
CKSRYB822K50C6831,C6848,C6856,C6857,C6881
C6883,C6885,C6887,C6890,C6891
C6893,C6894,C6897,C6898
C6903,C6904,C6907-C6910,C6912
C6916,C6923-C6926CKSSYF104Z16
CKSSYF104Z16
CKSSYF104Z16
CKSSYF104Z16
CKSSYF104Z16

C6854,C6855 (10uF/16V)

DCH1165

RESISTORSR6881-R6883,R6885,R6892,R6896
R6901,R6904
R6859
R6939,R6940
R6832,R6833RAB4CQ101J
RAB4CQ101J
RS1/16S0R0J
RS1/16S104J
RS1/16S222J**RESISTORS**R6681,R6685
R6608,R6613,R6621,R6627
R6643,R6644
R6628,R6636-R6641
R6607,R6611,R6612,R6619,R6620RAB4CQ101J
RAB4CQ330J
RAB4CQ330J
RS1/16S0R0J
RS1/16S1000FR6889
R6915
R6872
Other ResistorsRS1/16S3900F
RS1/16S3901F
RS1/16S473J
RS1/16SS###J**OTHERS**

JA6881 HDMI CONNECTOR

AKP1232

CAPACITORS

C6853

CCSRCH470J50

RESISTORSR6826
R6834,R6836,R6944,R6947-R6950
R6835,R6839,R6937,R6938
Other ResistorsRAB4CQ101J
RAB4CQ103J
RAB4CQ470J
RS1/16SS###J

Other Resistors

RS1/16SS###J

[HDMI RX BLOCK]

[ROZ BLOCK]

SEMICONDUCTORS

5		6	7		8	
Mark No.	Description	Part No.	Mark No.	Description	Part No.	
IC6951		PD6435A	R7113,R7115,R7116,R7119,R7121		RAB4CQ101J	A
Q6951		RN1303	R7123,R7124		RAB4CQ101J	
			R7102,R7105-R7108,R7110,R7111		RAB4CQ330J	
			Other Resistors		RS1/16SS###J	
CAPACITORS			SEMICONDUCTORS			
C6959,C6960		CCSRCH150J50	IC7151		MBM29PL3200BE70PFV	
C6951		CEHVKW101M6R3				
C6952-C6954,C6956-C6958		CKSSYF104Z16				
C6961,C6962,C6964-C6968		CKSSYF104Z16				
RESISTORS			CAPACITORS			
R6951-R6953,R6956-R6962,R6966		RAB4CQ100J	C7151,C7153-C7157		CKSSYF104Z16	
R6968,R6972		RAB4CQ100J				
R6945,R6946,R6988		RAB4CQ103J				
Other Resistors		RS1/16SS###J	RESISTORS		RS1/16SS###J	
			Other Resistors			
OTHERS			[MAIN UCOM BLOCK]			B
X6951	CERAMIC RESONATOR	ASS1169	SEMICONDUCTORS			
			IC7205		BR24L64F-W	
RESISTORS			IC7207		MB91F355APMTGE1	
R6982-R6986,R6992		RAB4CQ101J	IC7201		MM1522XU	
Other Resistors		RS1/16SS###J	IC7209		NJM12904V	
			IC7211		PQ20WZ11	
OTHERS						
CN6951	50P CONNECTER	AKM1201	IC7210		PST3612UR	
			IC7203,IC7206		PST3628UR	
			IC7202		TC74VHC125FT	
			Q7203		2SA1586	
			Q7201		2SJ461A	C
[CELIA BLOCK]						
SEMICONDUCTORS			Q7202		HN1C01FU	
IC7001,IC7002		HY57V643220CT-7	Q7206,Q7207		RN1902	
IC7004		PE5362A	D7201,D7202		1SS355	
IC7003		TC74LCX125FT	D7203		SML-311UT	
			D7204		UDZS2R7(B)	
COILS AND FILTERS			CAPACITORS			
F7001,F7002	EMI FILTER	CCG1162	C7244		CCSRCH100D50	
			C7231		CCSRCH102J50	
CAPACITORS			C7243,C7245		CCSRCH221J50	
C7031 (10/6.3)		ACG7046	C7241,C7242,C7248,C7249		CCSRCH470J50	
C7029,C7041		ACH1365	C7213,C7218		CCSRCH7R0D50	D
C7064		CCSRCH100D50				
C7025,C7066,C7067		CCSRCH221J50				
C7001-C7024,C7026-C7028		CKSSYF104Z16				
C7032-C7040,C7042-C7063		CKSSYF104Z16	C7205		CEHVKW101M6R3	
			C7201,C7217,C7236,C7239,C7252		CKSRYB103K50	
RESISTORS			C7226,C7237		CKSRYB104K16	
R7013-R7018,R7030		RAB4CQ220J	C7216		CKSRYB472K50	
R7007		RS1/16S220J	C7209-C7212,C7214,C7215,C7219		CKSSYF104Z16	
Other Resistors		RS1/16SS###J				
			C7221-C7225,C7227-C7229		CKSSYF104Z16	
OTHERS			C7232-C7234,C7238,C7240		CKSSYF104Z16	
X7001	CRYSTAL OSCILLATOR	ASS1174	C7246,C7247,C7253 (10uF/16V)		DCH1165	
	(85MHz)					
[MIKE BLOCK]			RESISTORS			E
SEMICONDUCTORS			R7221,R7229,R7241,R7248-R7250		RAB4CQ101J	
IC7152		MBM29PL3200BE70PFV	R7201		RAB4CQ472J	
IC7101		PD5855A	R7244,R7245,R7275,R7286,R7287		RS1/16S0R0J	
			R7290,R7295-R7306		RS1/16S0R0J	
			R7269		RS1/16S101J	
COILS AND FILTERS						
F7101,F7102		CCG1162	R7278		RS1/16S2201F	
			R7215		RS1/16S223J	
CAPACITORS			R7279		RS1/16S4700F	
C7103,C7120 (330uF/6.3V)		ACH1365	R7227,R7260		RS1/16S473J	
C7101,C7102,C7104-C7119		CKSSYF104Z16	R7224		RS1/16S682J	
C7121-C7135,C7152,C7158-C7162		CKSSYF104Z16				
			R7280		RS1/16S7500F	
RESISTORS			R7277		RS1/16S8201F	F
			Other Resistors		RS1/16SS###J	

Mark No. Description**Part No.****OTHERS**

CN7203 3P CONNECTOR
 CN7201 PLUG 8-P
 CN7202 3P PH CONNECTOR
 X7201 CERAMIC RESONATOR

AKM1213
 AKM1225
 AKM1274
 ASS1170

SEMICONDUCTORS

IC7204

TC74VHC125FT

CAPACITORS

C7258-C7261
 C7256,C7257
 C7220

CCSRCH470J50
 CKSRYB103K50
 CKSSYF104Z16

RESISTORS

Other Resistors

RS1/16SS###J

OTHERS

CN7204 3P PH CONNECTOR

AKM1274

[MR IF BLOCK] [REGLATORBLOCK]

SEMICONDUCTORS

IC7453
 IC7454
 IC7456
 IC7401
 IC7404

BA33BC0WFP
 BA50BC0WFP
 NCP1117DT15
 SII170BCLG64
 TC74VCX08FT

IC7403
 IC7451
 Q7406
 Q7405
 Q7403,Q7407,Q7408

TC74VCX574FT
 TC74VHC08FT
 2SA1586
 HN1C01FU
 RN1303

Q7451
 Q7401
 Q7402,Q7404,Q7409
 D7401-D7407,D7457-D7459

RN1901
 RN1902
 RN2303
 1SS355

COILS AND FILTERS

F7405-F7408 EMI FILTER
 L7401 (3.3uH)
 F7401-F7404 EMI FILTER

ATF1209
 ATH1162
 CCG1162

CAPACITORS

C7416,C7421,C7424,C7484 (10/6.3)
 C7474 (330uF/6.3V)
 C7401,C7402
 C7475,C7477-C7482
 C7403,C7404,C7406,C7407

ACG7046
 ACH1365
 CCSRCH100D50
 CCSRCH221J50
 CCSRCH820J50

C7410,C7411,C7413,C7414,C7419
 C7456,C7460,C7465
 C7405,C7412,C7415,C7417,C7418
 C7420,C7423,C7451,C7452
 C7454,C7455,C7458,C7459,C7466

CCSRCH820J50
 CEHVKW101M6R3
 CKSSYF104Z16
 CKSSYF104Z16
 CKSSYF104Z16

C7469,C7473,C7476
 C7453,C7457 (10uF/16V)

CKSSYF104Z16
 DCH1165

RESISTORS

R7425,R7449,R7451,R7452,R7454
 R7481,R7497-R7499
 R7453
 R7440,R7441,R7443
 R7417,R7418,R7429,R7431

RAB4CQ101J
 RAB4CQ101J
 RAB4CQ103J
 RS1/16S0R0J
 RS1/16S111J

R7428,R7430

RS1/16S272J

Mark No. Description**Part No.**

R7410
 R7456
 R7455
 Other Resistors

RS1/16S5100F
 RS1LMF1R5J
 RS2LMF4R7J
 RS1/16SS###J

OTHERS

CN7454,CN7455 50P CONNECTER
 CN7453 PLUG 15-P
 CN7402 16P FFC CONNECTOR
 CN7451 PH 15P CONNECTOR
 CN7401 DVI SOCKET (24P)

AKM1201
 AKM1232
 AKM1234
 AKM1301
 AKP1250

SEMICONDUCTORS

IC7452

TC74VHC126FT

CAPACITORS

C7137,C7485,C7486
 C7068,C7471

CCSRCH470J50
 CKSSYF104Z16

RESISTORS

R7477
 R7383 (AWZ6944 only)
 R7385 (AWZ6990 only)
 Other Resistors

RAB4CQ101J
 RS1/16S222J
 RS1/16S222J
 RS1/16SS###J

BAV BOARD ASSY (AWZ6946/AWZ6986)

[TUNER BLOCK]

SEMICONDUCTORS

IC7502
 IC7501
 Q7503,Q7504,Q7506,Q7513,Q7522
 Q7524,Q7527,Q7528,Q7537
 Q7511,Q7517

MSP3417G
 TDA9818TS
 2SA1586
 2SA1586
 2SC4082

Q7501,Q7502,Q7505,Q7509,Q7512
 Q7514,Q7518-Q7520,Q7526,Q7530
 Q7533-Q7536,Q7538
 Q7516
 Q7532

2SC4116
 2SC4116
 2SC4116
 2SC4213
 DTA124EUA

Q7531
 D7504
 D7502,D7503
 D7501

DTC124EUA
 1SS355
 1SS356
 UDZS33(B)

COILS AND FILTERS

L7501
 L7512,L7513
 L7520
 L7514
 L7511

LCTAW100J2520
 LCTAW150J2520
 LCTAW270J2520
 LCTAW4R7J2520
 LCTAW8R2J2520

L7519
 L7516
 L7505,L7507
 F7511,F7512
 F7506 SAW FILTER

LCTAWR22J2520
 LCTAWR27J2520
 LCTAWR68J2520
 VTF1080
 VTF1177

F7503 SAW FILTER
 F7504 IF TRAP FILTER
 F7505 IF TRAP FILTER
 F7501 TRAP FILTER
 L7504 VCO COIL

VTF1179
 VTF1180
 VTF1181
 VTF1183
 VTL1164

CAPACITORS

C7507 (220uF/10V)
 C7552 (3.3uF/50V)

ACH1368
 ACH1385

5			6			7			8		
Mark No.	Description	Part No.	Mark No.	Description	Part No.	Mark No.	Description	Part No.	Mark No.	Description	Part No.
C7509,C7525,C7549,C7591,C7599 (100uF/16V) C7564,C7573		ACH1394				Q7729-Q7731,Q7733,Q7735,Q7737 Q7739,Q7742,Q7744,Q7746,Q7747 Q7749,Q7758-Q7760 Q7704,Q7721,Q7738,Q7741 Q7754,Q7755,Q7757		2SC4116 2SC4116 2SC4116 DTA124EUA DTA124EUA			
C7515 C7568 C7578 C7601 C7567		CCSRCH120J50 CCSRCH121J50 CCSRCH181J50 CCSRCH220J50 CCSRCH470J50				Q7715 Q7717,Q7718,Q7725,Q7734,Q7736 Q7701,Q7745 D7709,D7710,D7715,D7722 D7705-D7708,D7713,D7714,D7716		DTC124EUA HN1A01FU HN1C01FU 1SS301 1SS302			
C7556,C7558 C7569 C7576 C7602 C7570		CCSRCH560J50 CCSRCH5R0C50 CCSRCH680J50 CCSRCH820J50 CCSRCJ3R0C50				D7719,D7720 D7703,D7721 D7701,D7711,D7717 D7702,D7712,D7718,D7723-D7735		1SS302 1SS355 UDZS12(B) UDZS9R1(B)			
C7501 C7596 C7542 C7537,C7539 C7502,C7520,C7522,C7523		CEHVKW100M50 CEHVKW330M10 CEHVKW470M16 CKSQYB225K10 CKSRYB102K50				COILS AND FILTERS					
C7534,C7535,C7579,C7580 C7514,C7524,C7528,C7536,C7545 C7554,C7572 C7541 C7503		CKSRYB102K50 CKSRYB103K50 CKSRYB103K50 CKSRYB104K16 CKSRYB105K10				L7701,L7702,L7705,L7706 L7709,L7710 L7703,L7704,L7707,L7708 L7711-L7714		LCTAW1R0J2520 LCTAW1R0J2520 LCTAW560J2520 LCTAW560J2520			
C7559,C7561,C7588 C7590 C7504,C7505,C7526 C7540 C7518		CKSRYB152K50 CKSRYB221K50 CKSRYB222K50 CKSRYB224K10 CKSRYB332K50				SWITCHES AND RELAYS					
C7557,C7560,C7589 C7563,C7571 C7575 C7506,C7510,C7513,C7527,C7531 C7547,C7550,C7551,C7555,C7577		CKSRYB471K50 CKSRYB472K50 CKSRYF104Z16 CKSRYF104Z50 CKSRYF104Z50				S7701		ASH1029			
C7511,C7546,C7548,C7553,C7562 C7587 (10uF/16V)		DCH1165 DCH1165				CAPACITORS					
RESISTORS						C7714,C7719,C7726,C7729,C7736 C7740,C7760,C7761 (2.2/10) C7706,C7709,C7728,C7730,C7743 C7756 C7716		CCG1205 CCG1205 CEHAT471M10 CEHAT471M10 CEVWNP470M10			
R7568 R7633 R7524 R7554 R7544,R7552		RD1/2LMF100J RS1/16S1201F RS1/16S2203F RS1/16S2700F RS1/16S2702F				C7773-C7780 C7757 C7701-C7703,C7722-C7725,C7735 C7746-C7749,C7752-C7754,C7758 C7705,C7727,C7731,C7741,C7744		CKSRYB102K50 CKSRYB103K50 CKSRYB105K10 CKSRYB105K10 CKSRYF104Z50			
R7504 R7655,R7656 R7555 VR7504 VR7502		RS1/16S3302F RS1/16S5600F RS1/16S6800F CCP1390 CCP1398				C7751 C7707,C7708,C7712,C7713,C7715 C7717,C7718,C7720,C7734 C7737,C7738,C7742,C7745,C7750 C7755,C7759,C7762-C7764 (10uF/16V)		CKSRYF104Z50 DCH1165 DCH1165 DCH1165 DCH1165			
Other Resistors		RS1/16S####J				RESISTORS					
X7501 CERAMIC RESONATOR (18.432 MHz) ⚠ U7501 TV FRONTEND		VSS1189 AXF1133				R7708,R7717,R7756,R7757,R7761 R7777,R7801,R7802,R7809,R7810 R7820,R7834 R7841 R7842		RS1/10S151J RS1/10S151J RS1/10S151J RS1/16S1001F RS1/16S1501F			
OTHERS						R7709,R7718,R7723,R7724,R7729 R7735,R7739,R7745,R7770,R7821 R7843,R7853,R7858 Other Resistors		RS1/16S75R0F RS1/16S75R0F RS1/16S75R0F RS1/16S####J			
OTHERS						OTHERS					
						JA7703 6P PIN JACK ⚠ JA7701 RGB CONNECTOR ⚠ JA7705 RGB CONNECTOR		AKB1300 AKP1265 AKP1266			
SEMICONDUCTORS						SEMICONDUCTORS					
Q7706,Q7707,Q7710,Q7716 Q7723,Q7724,Q7728,Q7740,Q7743 Q7748 Q7702,Q7703,Q7705,Q7712-Q7714 Q7719,Q7720,Q7722,Q7726,Q7727		2SA1586 2SA1586 2SA1586 2SC4116 2SC4116				IC7701,IC7702 Q7752,Q7753 Q7750,Q7751 Q7711,Q7761		TC74VHC125FT 2SA1586 2SC4116 DTA124EUA			

Mark No. DescriptionQ7762
D7736,D7737**Part No.**DTC124EUA
1SS301**Mark No. Description**

Q8028

Part No.

HN1B04FU

A CAPACITORSC7767
C7768
C7765,C7766ACH1400
CKSRYB224K10
CKSRYF104Z50**CAPACITORS**C8064,C8065
C8075
C8063,C8066,C8069,C8070
C8072-C8074
C8071CEHVKW100M16
CEHVKW470M16
CKSRYB105K10
CKSRYB105K10
CKSRYB471K50**RESISTORS**

Other Resistors

RS1/16S###J

C8080,C8081

DCH1165

OTHERS

JA7704 PINJACK+MINI DIN 4P

AKB1307

RESISTORSR8125,R8127
Other ResistorsRD1/2LMF120J
RS1/16S###J**B [AV SW BLOCK]****SEMICONDUCTORS**IC8005
IC8002
IC8004
IC8003
Q8005,Q8006AN15852A
CXA2069Q
NJM12904V
TC4052BFT
2SA1586**[AV REG BLOCK]****SEMICONDUCTORS**IC8505,IC8506
IC8504
IC8509
IC8503
IC8508BA50BC0WFP
BA90BC0WFP
BD6522F
M5291FP
NCP1117DT25Q8021,Q8022,Q8025
Q8023
Q8024
Q8011
D80172SC4116
DTA124EUA
DTC124EUA
HN1C01FU
1SS355IC8507
Q8507,Q8550
Q8515
Q8511
D8506,D8509-D8513NCP1117ST33
2SC4116
DTC124EUA
TPC8003
1SS355**C****CAPACITORS**C8005,C8006,C8056 (100uF/16V)
C8014 (22uF/16V)
C8022,C8027
C8057
C8019,C8038ACH1394
ACH1400
CCSRCH181J50
CCSRCH270J50
CCSRCH681J50C8002-C8004,C8008,C8009,C8016
C8001,C8013,C8015,C8025,C8026
C8031-C8036,C8039,C8042-C8044
C8048,C8052,C8053,C8055,C8059
C8010,C8012,C8018,C8023,C8024CKSRYB105K10
CKSRYF104Z50
CKSRYF104Z50
CKSRYF104Z50
DCH1165**COILS AND FILTERS**L8502 INDUCTOR
F8501-F8504,F8506,F8508,F8510
EMI FILTER
⚠ L8505-L8507ATH1126
CCG1162
LCTAWR22J2520**D**C8028,C8037,C8040,C8041
C8060,C8061 (10uF/16V)DCH1165
DCH1165**CAPACITORS**C8536 (47uF/16V)
C8512 (100uF/16V)
C8519
C8506
C8520ACH1371
ACH1394
CCSRCH221J50
CCSRCH560J50
CEHAT101M50**RESISTORS**

Other Resistors

RS1/16S###J

C8545,C8559

CEHAZL471M16
CEHVKW100M16
CEHVKW100M50
CEHVKW101M6R3
CEHVKW220M16**SEMICONDUCTORS**IC8001
Q8026,Q8027
D8015,D8016
D8013,D8014TC7WH123FU
2SC4116
1SS355
UDZS9R1(B)C8563
C8561
C8517,C8523,C8528,C8533
C8510,C8515,C8521,C8526,C8531CEHVKW220M16
CKSRYB103K50
CKSRYB103K50
CKSRYB103K50
CKSRYB103K50**E****CAPACITORS**C8050
C8076,C8077
C8049
C8051 (10uF/16V)CKSRYB105K10
CKSRYB471K50
CKSRYF104Z50
DCH1165C8565
C8511,C8513,C8516,C8518,C8522
C8524,C8527,C8529,C8530,C8532
C8534,C8540,C8542,C8551,C8560
C8562,C8564CKSRYB821K50
DCH1165**RESISTORS**

Other Resistors

RS1/16S###J

RESISTORSR8508
R8506,R8510,R8511,R8522,R8530
R8533-R8535,R8560-R8563
R8551
R8550ACN1164
ACN1188
ACN1188
ACN1199
RD1/2LMF181J**F****SEMICONDUCTORS**IC8006
IC8007
Q8007,Q8008,Q8012,Q8014
Q8013,Q8015,Q8019,Q8020BH3540AFS
BH3544F
2SA1586
2SC4116R8509
R8520RS1/16S1101F
RS1/16S3302F

5	6	7	8
Mark No. Description	Part No.	Mark No. Description	Part No.
R8528,R8531,R8543,R8545 R8525 R8554 Other Resistors	RS1LMF1R0J RS1LMF3R3J RS3LMF121J RS1/16S###J	IC8704 Q8703 Q8702	TC7W126FU DTA124EUA DTC124EUA
OTHERS CN8651 PLUG(15P)	KM200NA15	CAPACITORS C8711 (100uF/16V) C8706,C8707 C8717,C8718 C8709 C8701-C8705,C8708,C8712,C8713 C8716 (10uF/16V)	ACH1394 CCSRCH180J50 CCSRCH470J50 CKSRYB472K50 CKSRYF104Z50 DCH1165
SEMICONDUCTORS IC8502 Q8508 Q8509,Q8514 D8516	M5291FP 2SD1664 DTC124EUA RB160M-30	RESISTORS R8719 R8702,R8704,R8720,R8745 Other Resistors	RAB4C101J RAB4C103J RS1/16S###J
COILS AND FILTERS F8512-F8514 L8504	CCG1162 LCTAW560J2520	OTHERS CN8701 PLUG 8-P X8702 CERAMIC RESONATOR X8701 CRYSTAL OSCILLATOR (32.768kHz)	AKM1225 ASS1168 ASS1172
CAPACITORS C8556 C8554 C8555 C8553	CCSRCH221J50 CCSRCH681J50 CEHAZL471M16 CEHVKW101M6R3	[TELETEXT BLOCK] SEMICONDUCTORS IC8901 IC8904 IC8907 IC8902 Q8904-Q8906 Q8909 Q8911 Q8913 Q8910,Q8914 Q8907,Q8908 D8902 D8901	PST9230N SDA6000 TC7SH04FU TC7W126FU 2SA1586 2SC4116 2SC5729 DTA124EUA DTC124EUA RN1902 UDZS3R0(B) UDZS3R9(B)
RESISTORS R8568,R8569,R8571 R8572 R8573 Other Resistors	ACN1163 RS1/16S1501F RS1/16S6801F RS1/16S###J	CAPACITORS C8916 C8917 C8941,C8942,C8944-C8949 C8952-C8956 C8904,C8940 C8903 C8926 C8901 C8902,C8909-C8911,C8914,C8915 C8918-C8920,C8923-C8925 C8927,C8928,C8930-C8936 C8937-C8939 (10uF/16V)	C D
OTHERS CN8502 U8502 DD CON UNIT	KM200NA6 AXY1090		
COILS AND FILTERS L8503	ATH1185		
[BOARD IF BLOCK] CAPACITORS C8656,C8657 (2.2/10) C8658-C8660 C8653-C8655,C8661-C8663	CCG1205 CKSRYB105K10 DCH1165		
RESISTORS Other Resistors	RS1/16S###J		
OTHERS CN8652-CN8654 50P CONNECTER CN8658 12P FFCCONNECTOR	AKM1201 AKM1233		
OTHERS CN8662 40P CONNECTER	AKM1303		
OTHERS CN8660 12P FFCCONNECTOR	AKM1233		
[UIF UCOM BLOCK] SEMICONDUCTORS IC8705 IC8702 IC8703 IC8701	BR24L01AFJ-W HD64F3687FP PST9231N TC74VHC08FT	RESISTORS R8891,R8893,R8894 R8905-R8907,R8922,R8960,R8991 R8896-R8899 R8999-R9001 R8996-R8998 Other Resistors OTHERS CN8901 PLUG 8-P	E F

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Mark No. DescriptionK 8905 TEST PIN
X8901 CRYSTAL OSCILLATOR**Part No.**AKX9002
ASS1187**Mark No. Description**

CN9452 CONNECTOR

Part No.

CKS3826

A

[MEMORY SW BLOCK]

SEMICONDUCTORSIC9104
IC9105
Q9102-Q9104,Q9106
Q9101,Q9105
Q9108K4S641632H-TC75
TC4051BF
2SA1586
2SC5729
DTA124EUAQ9107
D9101-D9104,D9106
D9105DTC124EUA
1SS355
UDZS12(B)

B

CAPACITORSC9128,C9132-C9139
C9117,C9131
C9101,C9107-C9110,C9113,C9114
C9116,C9119,C9120,C9123
C9129,C9130CCSRCH560J50
CKSRYB474K10
CKSRYF104Z50
CKSRYF104Z50
CKSRYF104Z50**RESISTORS**R9141-R9144
Other ResistorsRAB4C470J
RS1/16S###J

C

SEMICONDUCTORS

IC9107

TC4051BF

CAPACITORS

C9124

CKSRYF104Z50

E

**MDR ASSY
SEMICONDUCTORS**IC9301,IC9302
Q9301,Q9302
Q9303TC74VHC08FT
2SC4116
DTA124EUA

D

CAPACITORSC9304
C9301,C9305-C9308
C9302,C9303CCSRCH101J50
CCSRCH471J50
CKSRYF104Z50**RESISTORS**

Other Resistors

RS1/16S###J

OTHERSCN9301 SOCKET (20P)
CN9302 CONNECTORAKP1226
CKS3830

E

**SR ASSY (AWZ6949)
SEMICONDUCTORS**IC9451
IC9452SP3232ECY
TC74VHC125FT**CAPACITORS**C9456,C9457
C9451-C9455,C9460CEHVKW100M16
CKSRYF104Z16**RESISTORS**

Other Resistors

RS1/16S###J

OTHERS

JA9451 9P D-SUB SOCKET

AKP1240

SEMICONDUCTORSIC9453
Q9455,Q9458
Q9453
Q9454,Q9456,Q9457
D9451,D9452,D9459,D9460TC74VHC00FT
2SA1586
2SC4116
DTC124EUA
1SS355**CAPACITORS**

C9459

CKSRYF104Z16

RESISTORS

Other Resistors

RS1/16S###J

OTHERSJA9453 MINI JACK(4P)
JA9452 JACKAKN1073
RKN1004**FRONT ASSY (AWZ6951)
SEMICONDUCTORS**

D9509-D9511,D9517,D9518

UDZS9R1(B)

COILS AND FILTERS

L9503,L9504

LCTAW1R0J2520

CAPACITORSC9505,C9506
C9504
C9507-C9510
C9503
C9516CKSRYB103K50
CKSRYB104K16
CKSRYB105K10
CKSRYB473K16
CKSRYF104Z16

C9515,C9523,C9534-C9536

DCH1165

RESISTORSR9504,R9507,R9508
Other ResistorsRS1/16S75R0F
RS1/16S###J**SEMICONDUCTORS**IC9501
IC9502
Q9503-Q9505
Q9501,Q9502
D9503BR24C21FJ
TC74VHC08FT
2SC4116
DTC124EUA
1SS301

D9506-D9508

D9501,D9502,D9504,D9505
D9512,D9513

1SS302

UDZS5R6(B)
UDZS5R6(B)**COILS AND FILTERS**L9505,L9506
L9501,L9502LCTAW1R0J2520
LCTAW560J2520**CAPACITORS**C9517,C9518
C9501,C9502
C9520-C9522
C9531-C9533
C9514CCSRCH220J50
CEHAT471M10
CEHVKW470M6R3
CKSRYB103K50
CKSRYB104K16

C9511,C9512

C9519
C9513CKSRYB105K10
CKSRYF104Z16
DCH1165

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5		6	7	8	
Mark No.	Description	Part No.	Mark No.	Description	Part No.
RESISTORS					
R9534-R9536		RS1/16S75R0F	L1000	CHIP BALUN TRANS.	XTX1005
Other Resistors		RS1/16S###J			
OTHERS			CAPACITORS		
CN9503	MINI JACK	AKN1028	C1018,C1019		CCSRCH101J50
JA9505	15P D-SUB SOCKET	AKP1241	C1037,C1038		CCSRCH5R0C50
JA9503	JACK	RKN1026	C1015		CEHVKW100M16
			C1014		CEHVKW100M50
			C1006,C1007,C1013,C1022,C1050		CEHVKW470M16
OTHERS					
JA9501	PIN JACK(3P)	AKB1303	C1053-C1056,C1101		CEHVKW470M16
CN9502	50P CONNECTER	AKM1201	C1009		CKSRYB102K50
JA9502	4P MINIDIN SOCKET(S)	AKP1238	C1000,C1001,C1010,C1016		CKSRYB103K50
			C1034,C1035,C1039		CKSRYB103K50
			C1003-C1005,C1012,C1017		CKSRYB104K16
OTHERS					
△ 9501	F GROUNDIG PLATE	ANG2657	C1020,C1021,C1023-C1025		CKSRYB104K16
			C1027-C1029,C1031-C1033,C1036		CKSRYB104K16
			C1040,C1043-C1049,C1200,C1201		CKSRYB104K16
			C1030		CKSRYB105K10
LED ASSY (AWZ6953)			RESISTORS		
SEMICONDUCTORS			Other Resistors		RS1/16S###J
Q9651		DTA124EUA			
Q9652		RN2902	OTHERS		
D9652		SML-310DT	X1000	CRYSTAL RESONATOR	XSS1004
D9654		SML-310MT	(27MHz)		
D9653		SML-311UT	M1000	FRONT END	XXF1006
CAPACITORS					
C9651		CKSRYB103K50	[DEMUX BLOCK]		
			SEMICONDUCTORS		
RESISTORS			IC2001		SN74LVU04APW
Other Resistors		RS1/16S###J	IC2000		STI5517PWAL
			Q2000		2SC4081
OTHERS			D2000		DA204U
CN9651	7P PH CONNECTOR	AKM1293	D2002		HVU307
			D2001		PDZ8.2B
			D2005,D2009		RB501V-40
			VA2001		AVR-M1608C120MT2AB
TUNER BOARD ASSY			COILS AND FILTERS		
SEMICONDUCTORS			F2000-F2003	FERRITE CORE	VTF1091
IC9013		XYW1004	L2200	CHIP FERRITE BEADS	XTX1003
OTHERS					
9012	PCMCIA EJECTOR	ANG2673			
9005-9007	SCREW	BBZ30P060FTB	CAPACITORS		
9008-9011	SCREW	PMZ20P100FNI	C2012,C2014		CCSRCH100D50
9003	TOP CAN	XNG1001	C2024,C2028,C2047		CCSRCH101J50
9004	HEAT SINK	XNH1004	C2008		CCSRCH330J50
			C2009,C2010		CCSRCH390J50
			C2006		CCSRCH471J50
[TUNER BLOCK]					
SEMICONDUCTORS			C2030-C2032,C2034		CEHVKW470M16
IC1001		STV0361L	C2007,C2015,C2018,C2019		CKSRYB102K50
IC1000		UPC3221GV	C2011		CKSRYB105K10
Q1001		2SC2412K	C2000		CKSRYB471K50
Q1002		DTC124EUA	C2001,C2002,C2004,C2005		CKSRYF104Z16
Q1003,Q1004		RK7002			
			C2016,C2017,C2020-C2023,C2026		CKSRYF104Z16
D1000		1SS355	C2033,C2035-C2039,C2041-C2043		CKSRYF104Z16
D1300		SM15T6V8A	C2045,C2046		CKSRYF104Z16
D1001,D1002		UDZS3R6(B)	C2013		CKSRYF105Z10
			C2025,C2027,C2040,C2044		CKSRYF223Z50
COILS AND FILTERS					
L1003		LCYAR82J2520	C2003		CKSRYF474Z16
F1006,F1007,F1011-F1015		VTF1091			
F1100-F1104,F1200	FERRITE CORE	VTF1091	RESISTORS		
F1000	SAW FILTER	XTF1002	R2008,R2016,R2030		RAB4C103J
L1010	CHIP FERRITE BEADS	XTX1003	R2200,R2201		RAB4CQ470J

Mark No. Description

Other Resistors

OTHERS

X2001 CRYSTAL RESONATOR
X2000 CRYSTAL RESONATOR
(27MHz)

[MEMORY BLOCK]

SEMICONDUCTORS

IC3000,IC3003

COILS AND FILTERS

L3001 CHIP FERRITE BEADS
L3000 CHIP FERRITE BEADS

CAPACITORS

C3005
C3002-C3004,C3006,C3011
C3014-C3016,C3020
C3000,C3001,C3007,C3008
C3012,C3013,C3017-C3019

RESISTORS

R3003,R3102-R3111
Other Resistors

[A/V BLOCK]

SEMICONDUCTORS

IC4008
IC4003
IC4000
IC4001
Q4000,Q4100-Q4104

Q4200
D4002

COILS AND FILTERS

F4000 FERRITE CORE

CAPACITORS

C4056
C4004,C4007
C4019-C4023,C4025
C4015,C4027,C4032,C4033
C4008,C4053,C4100

C4003
C4006,C4030,C4048,C4052
C4101-C4104
C4011,C4012,C4054,C4055
C4002,C4005,C4009,C4010

C4000,C4001,C4013,C4014,C4018
C4024,C4026,C4028,C4029,C4057

RESISTORS

R4029,R4032-R4035,R4037
Other Resistors

OTHERS

CN4000 40P CONNECTER
JA4000 OPTICAL OUT MOD.
X4000 CRYSTAL (12.288MHz)

[CI BLOCK]

Part No.

RS1/16S###J

ASS1172
BSS1112

K4S281632F-UC75

XTX1001
XTX1003

CEHVKW470M16
CKSRYF104Z16
CKSRYF104Z16
CKSRYF223Z50
CKSRYF223Z50

RAB4CQ470J
RS1/16S###J

CS5340CZZ
CS8406CZZ
SN74LVU04APW
TSH72CDT
2SC4081

DTC124EUA
PDZ10B

VTF1091

CCSRCH101J50
CCSRCH220J50
CEHVKW100M16
CEHVKW2R2M50
CEHVKW470M16

CKSRYB102K50
CKSRYB103K50
CKSRYB103K50
CKSRYB105K10
CKSRYB332K50

CKSRYF104Z16
CKSRYF104Z16

RS1/16S2000F
RS1/16S###J

AKM1217
GP1FM513TZ
XSS1006

Mark No. Description**SEMICONDUCTORS**

IC5002
IC5003
IC5004,IC5005
IC5000
Q5000

Q5002,Q5004,Q5100
Q5101
D5000

CAPACITORS

C5009,C5202
C5000,C5002,C5200
C5004-C5008,C5010-C5013,C5100

RESISTORS

R5105-R5108
R5016,R5020,R5024,R5026,R5033
R5035,R5039-R5041,R5048-R5053
Other Resistors

OTHERS

CN5000 PCMCIA CONNECTOR

[CPLD/POWER BLOCK]

SEMICONDUCTORS

IC6200
IC6001
IC6000
Q6105
Q6100,Q6101

Q6104,Q6202
Q6103,Q6200,Q6201
D6003,D6201
D6200
D6101-D6103

COILS AND FILTERS

L6100
F6100

CAPACITORS

C6102
C6007
C6000,C6202
C6001,C6003,C6006,C6013,C6014
C6016,C6019,C6023,C6027,C6104

C6200,C6201
C6105
C6002,C6004,C6009-C6012
C6017,C6018,C6028,C6103,C6106
C6203

C6204
C6100,C6101

RESISTORS

R6100,R6208
R6201-R6203,R6209
R6004,R6006,R6104
R6110
R6029

Other Resistors

OTHERS**Part No.**

109865-PBF
74LCX245MTCX
74LCX373MTCX
BA05SFP
2SA1576A

DTC124EUA
TPC6004
1SS355

CEHVKW470M16
CKSRYB103K50
CKSRYF104Z16

RAB4C150J
RAB4CQ470J
RAB4CQ470J
RS1/16S###J

XKP1003

BA050LBSG2
BA05FP
XC9572XL-10VQG44C
2SA1576A
2SC2411K

DTA143EUA
DTC124EUA
1SS355
RB501V-40
UDZS5R6(B)

LCYAR82J2520
VTF1091

CCSRCH101J50
CEHVKW100M16
CEHVKW100M50
CEHVKW470M16
CEHVKW470M16

CEHVKW470M16
CKSRYB105K10
CKSRYF104Z16
CKSRYF104Z16
CKSRYF104Z16

CKSRYF105Z10
CKSRYF223Z50

RAB4C390J
RAB4CQ470J
RS1/10S0R0J
RS1/10S101J
RS1/10S681J

RS1/16S###J

5	6
Mark No.	Description
CN6003	50P CONNECTER
CN6002	PH 8P CONNECTOR
CN6001	PH 9P CONNECTOR
Part No.	AKM1236
	AKM1294
	AKM1295

J SW ASSY

SWITCHES AND RELAYS

⚠ S7451	ASG1093
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OTHERS

CN7456	2P-SIDE VA-CONNECTOR	S2P3-VH
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K POWER SUPPLY UNIT

POWER SUPPLY UNIT has no service part.

L PC CARD MODULE

PC CARD MODULE has no service part.

• PCB PARTS LIST (PDP-R05FE)

A MR MAIN BOARD ASSY (AWZ6945)

[GCR BLOCK]

RESISTORS

R6011-R6016,R6021,R6041,R6043	RS1/16S0R0J
R6045	RS1/16S0R0J

[MICHEL MAIN BLOCK]

SEMICONDUCTORS

IC6107	PD0278A
IC6101	TC7W126FU
Q6108	2SA1586
Q6101,Q6102	HN1A01FU
Q6106,Q6107	HN1B04FU

COILS AND FILTERS

F6101,F6103,F6105-F6107	CCG1162
	EMI FILTER
L6107	LCTAW220J2520
L6101-L6104	LCYC6R8K2125

CAPACITORS

C6102 (10/6.3)	ACG7046
C6126,C6142,C6163,C6164	CCSRCH330J50
C6171,C6172	CCSRCH330J50
C6127,C6143	CCSRCH680J50
C6182,C6186	CEHVKW101M6R3
C6188	CEHVKW470M6R3
C6151	CKSQYB225K10
C6112,C6114	CKSRYB102K50
C6119,C6136,C6153,C6154	CKSRYB104K16
C6168,C6169,C6177,C6185	CKSRYB104K16
C6101,C6155,C6175,C6190	CKSRYB105K6R3
C6103,C6104,C6107-C6111,C6113	CKSSYF104Z16
C6116,C6123-C6125,C6130-C6133	CKSSYF104Z16
C6140,C6141,C6146-C6148,C6150	CKSSYF104Z16
C6152,C6160-C6162,C6165-C6167	CKSSYF104Z16

7	8
Mark No.	Description
C6170,C6176,C6178-C6181	CKSSYF104Z16

RESISTORS

R6101,R6104-R6106,R6120	RAB4CQ100J
R6124,R6125	RAB4CQ100J
R6136,R6137,R6142-R6145	RS1/16S0R0J
R6194-R6196	RS1/16S1000F
R6115,R6131	RS1/16S100J

R6197,R6207	RS1/16S103J
R6147	RS1/16S1301F
R6198,R6208	RS1/16S183J
R6113,R6129	RS1/16S221J
R6126,R6138	RS1/16S2701F

R6112,R6123,R6128,R6141,R6165	RS1/16S271J
R6175	RS1/16S271J
R6170,R6171,R6174,R6176	RS1/16S331J
R6169,R6172,R6189	RS1/16S471J
R6122,R6140	RS1/16S473J

R6167,R6168	RS1/16S8201F
Other Resistors	RS1/16SS###J

OTHERS

X6101 CRYSTAL OSCILLATOR (27MHz)	ASS1175
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SEMICONDUCTORS

Q6104,Q6105,Q6109	2SA1586
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CAPACITORS

C6266,C6267	CCSRCH470J50
C6149,C6187,C6189	CKSSYF104Z16

RESISTORS

R6132-R6134	RAB4CQ103J
R6256-R6261	RS1/16S0R0J
Other Resistors	RS1/16SS###J

[AD MAIN BLOCK]

SEMICONDUCTORS

IC6402	AD80058
IC6404	BA7078AF
IC6401	SM5301BS
IC6405,IC6408	TC74VHC126FT
Q6405	HN1B04FU

Q6401	RN1303
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COILS AND FILTERS

F6401-F6404 EMI FILTER	CCG1162
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CAPACITORS

C6422,C6441 (10/6.3)	ACG7046
C6445	CCSRCH151J50
C6438	CKSRYB103K50
C6404,C6424	CKSRYB104K16
C6408,C6411,C6412,C6421,C6431	CKSRYB105K6R3

C6434,C6435	CKSRYB105K6R3
C6409,C6414,C6423	CKSRYB473K16
C6443	CKSRYB474K10
C6442	CKSRYB562K50
C6402	CKSRYB822K50

C6401	CKSRYB823K16
C6403,C6405-C6407,C6410,C6413	CKSSYF104Z16

Mark No. DescriptionC6415-C6420,C6425-C6429
C6439,C6440,C6444,C6448**Part No.**CKSSYF104Z16
CKSSYF104Z16**Mark No. Description**C6913
C6920**Part No.**CKSRYB104K16
CKSRYB473K16**A RESISTORS**R6482,R6489
R6405,R6410,R6418,R6424
R6438,R6439
R6420,R6431-R6436
R6404,R6408,R6409,R6416,R6417RAB4CQ101J
RAB4CQ330J
RAB4CQ330J
RS1/16S0R0J
RS1/16S1000FC6831,C6848,C6856,C6857,C6881
C6883,C6885,C6887,C6890,C6891
C6893,C6894,C6897,C6898
C6903,C6904,C6907-C6910,C6912
C6916,C6923-C6926CKSSYF104Z16
CKSSYF104Z16
CKSSYF104Z16
CKSSYF104Z16
CKSSYF104Z16

C6854,C6855 (10uF/16V)

DCH1165

R6423
R6406
R6422
R6478
R6472RS1/16S1000F
RS1/16S104J
RS1/16S1101F
RS1/16S153J
RS1/16S221J**RESISTORS**R6881-R6883,R6885,R6892,R6896
R6901,R6904
R6859
R6939,R6940
R6832,R6833RAB4CQ101J
RAB4CQ101J
RS1/16S0R0J
RS1/16S104J
RS1/16S222JR6479
R6414
R6401
R6413
R6465RS1/16S222J
RS1/16S224J
RS1/16S2701F
RS1/16S472J
RS1/16S682JR6889
R6915
R6872
Other ResistorsRS1/16S3900F
RS1/16S3901F
RS1/16S473J
RS1/16SS###J

Other Resistors

RS1/16SS###J

OTHERS

JA6881 HDMI CONNECTOR

AKP1232

SEMICONDUCTORS

IC6403,IC6406

MM1389XFBE

CAPACITORS

C6853

CCSRCH470J50

C CAPACITORSC6430,C6432,C6433,C6446,C6447
C6449-C6455
C6436,C6437CKSRYB105K6R3
CKSRYB105K6R3
CKSSYF104Z16**RESISTORS**R6826
R6834,R6836,R6944,R6947-R6950
R6835,R6839,R6937,R6938
Other ResistorsRAB4CQ101J
RAB4CQ103J
RAB4CQ470J
RS1/16SS###J**RESISTORS**R6636-R6641
Other ResistorsRS1/16S0R0J
RS1/16SS###J

[ROZ BLOCK]

SEMICONDUCTORSIC6951
Q6951PD6435A
RN1303**CAPACITORS**C6959,C6960
C6951
C6952-C6954,C6956-C6958
C6961,C6962,C6964-C6968CCSRCH150J50
CEHVKW101M6R3
CKSSYF104Z16
CKSSYF104Z16**RESISTORS**R6951-R6953,R6956-R6962,R6966
R6968,R6972
R6945,R6946,R6988
Other ResistorsRAB4CQ100J
RAB4CQ100J
RAB4CQ103J
RS1/16SS###J**OTHERS**

X6951 CERAMIC RESONATOR

ASS1169

RESISTORS

Other Resistors

RS1/16SS###J

[CELIA BLOCK]

SEMICONDUCTORSIC7001,IC7002
IC7004
IC7003HY57V643220CT-7
PE5362A
TC74LCX125FT**COILS AND FILTERS**

F7001,F7002 EMI FILTER

CCG1162

[HDMI RX BLOCK]

SEMICONDUCTORSIC6880
IC6803
IC6881
IC6806
Q6888,Q6889BR24L02FJ-W
PCM1742KE
SII9993CTG100
TC74HC4538AFT
2SA1586Q6885,Q6886
Q6884,Q6887
Q6881
Q6882
Q68802SC4116
RN1303
RN1902
RN2303
SM6K2D6880,D6881
D6808
D6806,D6807,D6884
D68831SS302
1SS355
DAN202U
UDZS6R8(B)**COILS AND FILTERS**

F6881 EMI FILTER

CCG1162

CAPACITORSC6802,C6849,C6851 (10/6.3)
C6880,C6882,C6884,C6886
C6888,C6889,C6892,C6895,C6896
C6899-C6902,C6905,C6906,C6915
C6917ACG7046
CCSRCH101J50
CCSRCH101J50
CCSRCH101J50
CCSRCH101J50C6927,C6928
C6921,C6922
C6911CCSRCH221J50
CEHVKW101M6R3
CEHVKW220M6R3

5

Mark No. Description

6

Part No.

CAPACITORS

C7031 (10/6.3)
C7029,C7041 (330uF/6.3V)
C7064
C7025,C7066,C7067
C7001-C7024,C7026-C7028

ACG7046
ACH1365
CCSRCH100D50
CCSRCH221J50
CKSSYF104Z16

C7032-C7040,C7042-C7063

CKSSYF104Z16

RESISTORS

R7013-R7018,R7030
R7007
Other Resistors

RAB4CQ220J
RS1/16S220J
RS1/16SS###J

OTHERS

X7001 CRYSTAL OSCILLATOR
(85MHz)

ASS1174

[MIKE BLOCK]

SEMICONDUCTORS

IC7152
IC7101

MBM29PL3200BE70PFV
PD5855A

COILS AND FILTERS

F7101,F7102 EMI FILTER

CCG1162

CAPACITORS

C7103,C7120 (330uF/6.3V)
C7101,C7102,C7104-C7119
C7121-C7135,C7152,C7158-C7162

ACH1365
CKSSYF104Z16
CKSSYF104Z16

RESISTORS

R7113,R7115,R7116,R7119,R7121
R7123,R7124
R7102,R7105-R7108,R7110,R7111
Other Resistors

RAB4CQ101J
RAB4CQ101J
RAB4CQ330J
RS1/16SS###J

SEMICONDUCTORS

IC7151

MBM29PL3200BE70PFV

CAPACITORS

C7151,C7153-C7157

CKSSYF104Z16

RESISTORS

Other Resistors

RS1/16SS###J

[MAIN UCOM BLOCK]

SEMICONDUCTORS

IC7205
IC7207
IC7201
IC7209
IC7211

BR24L64F-W
MB91F355APMTGE1
MM1522XU
NJM12904V
PQ20WZ11

IC7210
IC7203,IC7206
IC7202
Q7203
Q7201

PST3612UR
PST3628UR
TC74VHC125FT
2SA1586
2SJ461A

Q7202
Q7206,Q7207
D7201,D7202
D7203
D7204

HN1C01FU
RN1902
1SS355
SML-311UT
UDZS2R7(B)

7

Mark No. Description

8

Part No.

CAPACITORS

C7244
C7231
C7243,C7245
C7241,C7242,C7248,C7249
C7213,C7218

CCSRCH100D50
CCSRCH102J50
CCSRCH221J50
CCSRCH470J50
CCSRCH7R0D50

C7205
C7201,C7217,C7236,C7239,C7252
C7226,C7237
C7216
C7209-C7212,C7214,C7215,C7219

CEHV6KW101M6R3
CKSRYB103K50
CKSRYB104K16
CKSRYB472K50
CKSSYF104Z16

C7221-C7225,C7227-C7229
C7232-C7234,C7238,C7240
C7246,C7247,C7253 (10uF/16V)

CKSSYF104Z16
CKSSYF104Z16
DCH1165

RESISTORS

R7221,R7229,R7241,R7248-R7250
R7201
R7244,R7245,R7275,R7286,R7287
R7290,R7295-R7306
R7269

RAB4CQ101J
RAB4CQ472J
RS1/16S0R0J
RS1/16S0R0J
RS1/16S101J

R7278
R7215
R7279
R7227,R7260
R7224

RS1/16S2201F
RS1/16S223J
RS1/16S4700F
RS1/16S473J
RS1/16S682J

R7280
R7277
Other Resistors

RS1/16S7500F
RS1/16S8201F
RS1/16SS###J

OTHERS

CN7203 3P CONNECTOR
CN7201 PLUG 8-P
CN7202 3P PH CONNECTOR
X7201 CERAMIC RESONATOR

AKM1213
AKM1225
AKM1274
ASS1170

CAPACITORS

C7258-C7261
C7256,C7257

CCSRCH470J50
CKSRYB103K50

RESISTORS

Other Resistors

RS1/16SS###J

[MR IFBLOCK] [REGLATORBLOCK]

SEMICONDUCTORS

IC7453
IC7454
IC7456
IC7401
IC7404

BA33BC0WFP
BA50BC0WFP
NCP1117DT15
SII170BCLG64
TC74VCX08FT

IC7403
IC7451
Q7406
Q7405
Q7403,Q7407,Q7408

TC74VCX574FT
TC74VHC08FT
2SA1586
HN1C01FU
RN1303

Q7451
Q7401
Q7402,Q7404,Q7409
D7401-D7407,D7457-D7459

RN1901
RN1902
RN2303
1SS355

COILS AND FILTERS

Mark No. Description

F7405-F7408 EMI FILTER
L7401 (3.3uH)
F7401-F7404 EMI FILTER

Part No.

ATF1209
ATH1162
CCG1162

Mark No. Description

Q7531
D7504
D7502,D7503
D7501

Part No.

DTC124EUA
1SS355
1SS356
UDZS33(B)

CAPACITORS

C7416,C7421,C7424,C7484 (10/6.3)
C7474 (330uF/6.3V)
C7401,C7402
C7475,C7477-C7482
C7403,C7404,C7406,C7407

ACG7046
ACH1365
CCSRCH100D50
CCSRCH221J50
CCSRCH820J50

C7410,C7411,C7413,C7414,C7419
C7456,C7460,C7465
C7405,C7412,C7415,C7417,C7418
C7420,C7423,C7451,C7452
C7454,C7455,C7458,C7459,C7466

CCSRCH820J50
CEHVKW101M6R3
CKSSYF104Z16
CKSSYF104Z16
CKSSYF104Z16

C7469,C7473,C7476
C7453,C7457

CKSSYF104Z16
DCH1165

RESISTORS

R7425,R7449,R7451,R7452,R7454
R7481,R7497-R7499
R7453
R7440,R7441,R7443
R7417,R7418,R7429,R7431

RAB4CQ101J
RAB4CQ101J
RAB4CQ103J
RS1/16S0R0J
RS1/16S111J

R7428,R7430
R7410
R7456
R7455
Other Resistors

RS1/16S272J
RS1/16S5100F
RS1LMF1R5J
RS2LMF4R7J
RS1/16SS###J

OTHERS

CN7454,CN7455 50P CONNECTER
CN7453 PLUG 15-P
CN7402 16P FFC CONNECTOR
CN7451 PH 15P CONNECTOR
CN7401 DVI SOCKET (24P)

AKM1201
AKM1232
AKM1234
AKM1301
AKP1250

SEMICONDUCTORS

IC7452

TC74VHC126FT

CAPACITORS

C7137,C7485,C7486
C7068,C7471

CCSRCH470J50
CKSSYF104Z16

RESISTORS

R7477
R7384
Other Resistors

RAB4CQ101J
RS1/16S332J
RS1/16SS###J

COILS AND FILTERS

L7501
L7512,L7513
L7520
L7514
L7511

LCTAW100J2520
LCTAW150J2520
LCTAW270J2520
LCTAW4R7J2520
LCTAW8R2J2520

L7519
L7516
L7505,L7507
F7511,F7512
F7506 SAW FILTER

LCTAWR22J2520
LCTAWR27J2520
LCTAWR68J2520
VTF1080
VTF1177

F7503 SAW FILTER
F7504 IFTRAP FILTER
F7505 IFTRAP FILTER
F7501 TRAP FILTER
L7504 VCO COIL

VTF1179
VTF1180
VTF1181
VTF1183
VTL1164

CAPACITORS

C7507 (220uF/10V)
C7552 (3.3uF/50V)
C7509,C7525,C7549,C7591,C7599
(100uF/16V)
C7564,C7573

ACH1368
ACH1385
ACH1394

C7515
C7568
C7578
C7601
C7567

CCSRCH120J50
CCSRCH121J50
CCSRCH181J50
CCSRCH220J50
CCSRCH470J50

C7556,C7558
C7569
C7576
C7602
C7570

CCSRCH560J50
CCSRCH5R0C50
CCSRCH680J50
CCSRCH820J50
CCSRCJ3R0C50

C7501
C7596
C7542

CEHVKW100M50
CEHVKW330M10
CEHVKW470M16

C7537,C7539
C7502,C7520,C7522,C7523

CKSQYB225K10
CKSRYB102K50

C7534,C7535,C7579,C7580
C7514,C7524,C7528,C7536,C7545
C7554,C7572
C7541
C7503

CKSRYB102K50
CKSRYB103K50
CKSRYB103K50
CKSRYB104K16
CKSRYB105K10

C7559,C7561,C7588
C7590
C7504,C7505,C7526
C7540
C7518

CKSRYB152K50
CKSRYB221K50
CKSRYB222K50
CKSRYB224K10
CKSRYB332K50

C7557,C7560,C7589
C7563,C7571
C7575
C7506,C7510,C7513,C7527,C7531
C7547,C7550,C7551,C7555,C7577

CKSRYB471K50
CKSRYB472K50
CKSRYF104Z16
CKSRYF104Z50
CKSRYF104Z50


C7511,C7546,C7548,C7553,C7562
C7587 (10uF/16V)

DCH1165
DCH1165

RESISTORS

Mark No.	Description	Part No.
R7568		RD1/2LMF100J
R7633		RS1/16S1201F
R7524		RS1/16S2203F
R7554		RS1/16S2700F
R7544,R7552		RS1/16S2702F
R7504		RS1/16S3302F
R7655,R7656		RS1/16S5600F
R7555		RS1/16S6800F
VR7504		CCP1390
VR7502		CCP1398
Other Resistors		RS1/16S###J

OTHERS

X7501	CERAMIC RESONATOR (18.432 MHz)	VSS1189
 U7501	TV FRONTEND	AXF1133

[AV IO BLOCK]

SEMICONDUCTORS

Q7706,Q7707,Q7710,Q7716	2SA1586
Q7723,Q7724,Q7728,Q7740,Q7743	2SA1586
Q7748	2SA1586
Q7702,Q7703,Q7705,Q7712-Q7714	2SC4116
Q7719,Q7720,Q7722,Q7726,Q7727	2SC4116
Q7729-Q7731,Q7733,Q7735,Q7737	2SC4116
Q7739,Q7742,Q7744,Q7746,Q7747	2SC4116
Q7749,Q7758-Q7760	2SC4116
Q7704,Q7721,Q7738,Q7741	DTA124EUA
Q7754,Q7755,Q7757	DTA124EUA
Q7715	DTC124EUA
Q7717,Q7718,Q7725,Q7734,Q7736	HN1A01FU
Q7701,Q7745	HN1C01FU
D7709,D7710,D7715,D7722	1SS301
D7705-D7708,D7713,D7714,D7716	1SS302
D7719,D7720	1SS302
D7703,D7721	1SS355
D7701,D7711,D7717	UDZS12(B)
D7702,D7712,D7718,D7723-D7735	UDZS9R1(B)

COILS AND FILTERS

L7701,L7702,L7705,L7706	LCTAW1R0J2520
L7709,L7710	LCTAW1R0J2520
L7703,L7704,L7707,L7708	LCTAW560J2520
L7711-L7714	LCTAW560J2520

SWITCHES AND RELAYS

S7701 ASH1029

CAPACITORS

C7706,C7709,C7728,C7730,C7743	CEHAT471M10
C7756	CEHAT471M10
C7716	CEVWNP470M10
C7757	CKSRYB103K50
C7701-C7703,C7714,C7719	CKSRYB105K10
C7722-C7726,C7729,C7735,C7736	CKSRYB105K10
C7740,C7746-C7749,C7752-C7754	CKSRYB105K10
C7758,C7760,C7761	CKSRYB105K10
C7773-C7780	CKSRYB222K50
C7705,C7727,C7731,C7741,C7744	CKSRYF104Z50
C7751	CKSRYF104Z50
C7707,C7708,C7712,C7713,C7715	DCH1165
C7717,C7718,C7720,C7734	DCH1165
C7737,C7738,C7742,C7745,C7750	DCH1165

Mark No. **Description**

Part No.

COILS AND FILTERS

L8502 INDUCTOR
F8501-F8504,F8506,F8508,F8510
EMI FILTER
⚠ L8505-L8507

ATH1126
CCG1162

LCTAWR22J2520

CAPACITORS

C8536 (47uF/16V)
C8512 (100uF/16V)
C8519
C8506
C8520

ACH1371
ACH1394
CCSRCH221J50
CCSRCH560J50
CEHAT101M50

C8545,C8559
C8563
C8561
C8517,C8523,C8528,C8533
C8510,C8515,C8521,C8526,C8531

CEHAZL471M16
CEHVKW100M16
CEHVKW100M50
CEHVKW101M6R3
CEHVKW220M16

C8565
C8511,C8513,C8516,C8518,C8522
C8524,C8527,C8529,C8530,C8532
C8534,C8540,C8542,C8551,C8560
C8562,C8564

CEHVKW220M16
CKSRYB103K50
CKSRYB103K50
CKSRYB103K50
CKSRYB103K50

C8514
C8505,C8539,C8541,C8550
(10uF/16V)

CKSRYB821K50
DCH1165

RESISTORS

R8508
R8506,R8510,R8511,R8522,R8530
R8533-R8535,R8560-R8563
R8551
R8550

ACN1164
ACN1188
ACN1188
ACN1199
RD1/2LMF181J

R8509
R8520
R8528,R8531,R8543,R8545
R8525
R8554

RS1/16S1101F
RS1/16S3302F
RS1LMF1R0J
RS1LMF3R3J
RS3LMF121J

Other Resistors

RS1/16S###J

OTHERS

CN8651 PLUG(15P)
U8502 DD CON UNIT

KM200NA15
AXY1090

[BOARD IF BLOCK]

CAPACITORS

C8656-C8660
C8653-C8655,C8661-C8663
(10uF/16V)

CKSRYB105K10
DCH1165

RESISTORS

Other Resistors

RS1/16S###J

OTHERS

CN8652-CN8654 50P CONNECTER
CN8658 12P FFCCONNECTOR

AKM1201
AKM1233

[UIF UCOM BLOCK]

SEMICONDUCTORS

IC8705
IC8702
IC8703
IC8701

BR24L01AFJ-W
HD64F3687FP
PST9231N
TC74VHC08FT

Mark No. **Description**

Part No.

IC8704

TC7W126FU

Q8703
Q8702

DTA124EUA
DTC124EUA

CAPACITORS

C8711 (100uF/16V)
C8706,C8707
C8717,C8718
C8709
C8701-C8705,C8708,C8712,C8713

ACH1394
CCSRCH180J50
CCSRCH470J50
CKSRYB472K50
CKSRYF104Z50

C8716 (10uF/16V)

DCH1165

RESISTORS

R8719
R8702,R8704,R8720,R8745
Other Resistors

RAB4C101J
RAB4C103J
RS1/16S###J

OTHERS

CN8701 PLUG 8-P
X8702 CERAMIC RESONATOR
X8701 CRYSTAL OSCILLATOR
(32.768kHz)

AKM1225
ASS1168
ASS1172

[TELETEXT BLOCK]

SEMICONDUCTORS

IC8901
IC8904
IC8907
IC8902
Q8904-Q8906

PST9230N
SDA6000
TC7SH04FU
TC7W126FU
2SA1586

Q8909
Q8911
Q8913
Q8910,Q8914
Q8907,Q8908

2SC4116
2SC5729
DTA124EUA
DTC124EUA
RN1902

D8902
D8901

UDZS3R0(B)
UDZS3R9(B)

CAPACITORS

C8916
C8917
C8941,C8942,C8944-C8949
C8952-C8956
C8904,C8940

CCSRCH180J50
CCSRCH220J50
CCSRCH560J50
CCSRCH560J50
CKSRYB102K50

C8903
C8926
C8901
C8902,C8909-C8911,C8914,C8915
C8918-C8920,C8923-C8925

CKSRYB103K50
CKSRYB104K16
CKSRYB471K50
CKSRYF104Z50
CKSRYF104Z50

C8927,C8928,C8930-C8936
C8937-C8939 (10uF/16V)

CKSRYF104Z50
DCH1165

RESISTORS

R8891,R8893,R8894
R8905-R8907,R8922,R8960,R8991
R8896-R8899
R8999-R9001
R8996-R8998

RAB4C100J
RAB4C101J
RAB4C150J
RS1/16S1801F
RS1/16S9101F

Other Resistors

RS1/16S###J

OTHERS

CN8901 PLUG 8-P

AKM1225

Mark No. Description

Part No.

K 8905 TEST PIN
X8901 CRYSTAL OSCILLATOR

AKX9002
ASS1187

[MEMORY SW BLOCK]

SEMICONDUCTORS

IC9104
IC9105
Q9102-Q9104,Q9106
Q9101,Q9105
Q9108

K4S641632H-TC75
TC4051BF
2SA1586
2SC5729
DTA124EUA

Q9107
D9101-D9104,D9106
D9105

DTC124EUA
1SS355
UDZS12(B)

CAPACITORS

C9128,C9132-C9139
C9117,C9131
C9101,C9107-C9110,C9113,C9114
C9116,C9119,C9120,C9123
C9129,C9130

CCSRCH560J50
CKSRYB474K10
CKSRYF104Z50
CKSRYF104Z50
CKSRYF104Z50

RESISTORS

R9141-R9144
Other Resistors

RAB4C470J
RS1/16S###J

F SR ASSY (AWZ6950)

SEMICONDUCTORS

IC9451
IC9452

SP3232ECY
TC74VHC125FT

CAPACITORS

C9456,C9457
C9451-C9455,C9460

CEHVKW100M16
CKSRYF104Z16

RESISTORS

Other Resistors

RS1/16S###J

OTHERS

JA9451 9P D-SUB SOCKET
CN9452 CONNECTOR

AKP1240
CKS3826

G FRONT ASSY (AWZ6952)

SEMICONDUCTORS

D9509-D9511,D9517,D9518

UDZS9R1(B)

COILS AND FILTERS

L9503,L9504

LCTAW1R0J2520

CAPACITORS

C9505,C9506
C9504
C9507-C9510
C9503
C9516

CKSRYB103K50
CKSRYB104K16
CKSRYB105K10
CKSRYB473K16
CKSRYF104Z16

C9515,C9523,C9534-C9536

DCH1165

RESISTORS

R9504,R9507,R9508
Other Resistors

RS1/16S75R0F
RS1/16S###J

OTHERS

JA9501 PIN JACK(3P)

AKB1303

Mark No. Description

Part No.

CN9502 50P CONNECTER
JA9502 4P MINIDIN SOCKET(S)

AKM1201
AKP1238

H LED ASSY (AWZ6954)
SEMICONDUCTORS

Q9652
D9654
D9653

RN2902
SML-310MT
SML-311UT

CAPACITORS

C9651

CKSRYB103K50

RESISTORS

Other Resistors

RS1/16S###J

OTHERS

CN9651 7P PH CONNECTOR

AKM1293

- A
1.

At shipment, the unit is adjusted to its best conditions. Normally, it is not necessary to readjust even if an assembly is replaced. If the adjustment is shifted or if it becomes necessary to readjust because of part replacement, etc., perform the adjustment as described below.
2.

Any value changed in Service/Factory mode will be stored in memory as soon as it is changed. Before readjustment, take note of the original values for reference in case you need to restore the original settings.
3.

Use a stable AC power supply.

■

6.1 HOW TO ENTER SERVICE FACTORY MODE

■

Refer to the technical document (Service Know-How).

B

6.2 POSSIBLE CASES WHERE READJUSTMENT IS REQUIRED

■

When any of the following assemblies is replaced

C

POWER SUPPLY Unit	➡	No adjustment required
AV BOARD Assy	➡	No adjustment required
MR MAIN BOARD Assy	➡	No adjustment required
PC Card Unit	➡	No adjustment required
TUNER Board Assy	➡	No adjustment required
Other assemblies	➡	No adjustment required

■

When any part in the following assemblies is replaced

D

POWER SUPPLY Unit	➡	The assembly must be replaced as a unit, and no part replacement is allowed.
AV BOARD Assy	➡	If the front end (U7501) is replaced, adjustment is required.
MR MAIN BOARD Assy	➡	The assembly must be replaced as a unit, and no part replacement is allowed.
PC CARD Unit	➡	The assembly must be replaced as a unit, and no part replacement is allowed.
TUNER Board Assy	➡	The assembly must be replaced as a unit, and no part replacement is allowed.
Other assemblies	➡	No adjustment required

■

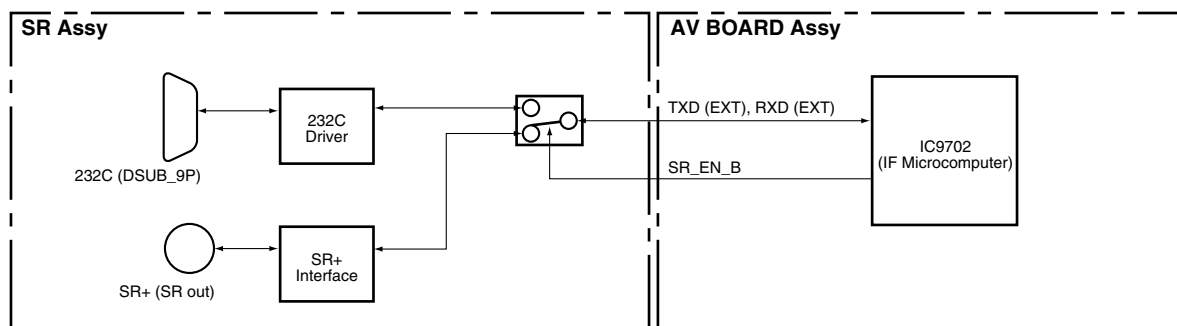
Adjustment items

- ① AFC Adjustment
- ② RF-AGC Adjustment
- ③ Video Level Adjustment

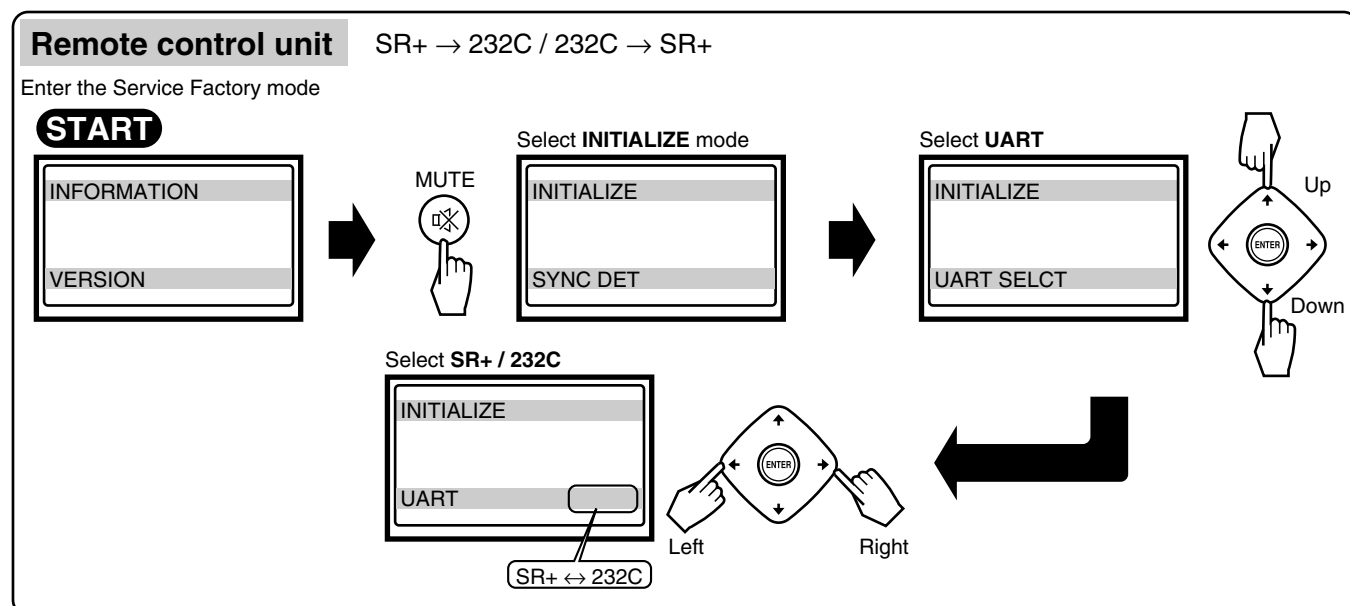
6.3 USING RS-232C COMMANDS

For the PDP-435HD and PDP-505HD series Plasma Displays, the circuitry is structured as shown in the diagram below to support the SR+ system. Controlling with either the SR+ system or RS-232C commands can be selected. As the SR+ system is selected at shipment, to control with RS-232C commands in servicing it is necessary to switch the paths. After servicing, be sure to return the setting to the SR+ system.

● Rough diagram of switching between SR+ and RS-232C



● How to switch from SR+ to RS-232C



Tips: How to change the SR+/RS-232C setting without entering Service Factory mode

Hold the **VOLUME** \triangleleft or \triangleleft key on the remote control unit pressed for 3-10 seconds during Standby mode. Then within 3 seconds after the key is released, hold the **2-screen** \blacksquare key on the remote control unit pressed for 3-10 seconds. Then within 3 seconds after the key is released, use the **SET** key on the remote control unit to set to RS-232C (the baud rate last selected is chosen) or the **HOME MENU** key to set to SR+.

4



● Adjustment Points

Rear side

**SIDE B**

1 AFC Adjustment

Equipment : SG, Digital mutimeter / Tester

Condition : Input RF level 75dB μ V

PAL-B/G

White bar 100%

START

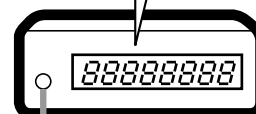


Select 175.25 MHz

1 ~ 9



L7504
(AV BOARD Assy)



Adjust TP7501 to 2.55V \pm 0.1V

Digital multimeter
/ Tester

TP7501
(AV BOARD Assy)

2 RF-AGC Adjustment

Equipment : SG, Digital mutimeter / Tester

Condition : Input RF level 64dB μ V \pm 1dB

PAL-B/G

Multiburst

START

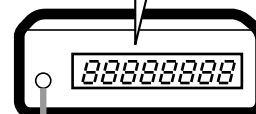


Select 196.25 MHz

1 ~ 9



VR7502
(AV BOARD Assy)



Adjust TP7506 to 2.95V \pm 0.05V

Digital multimeter
/ Tester

TP7506
(AV BOARD Assy)

3 Video Level Adjustment

Equipment : SG

Condition : Input RF level 75dB μ V

PAL-B/G

White bar 100%

START



Select 175.25 MHz

1

~

9

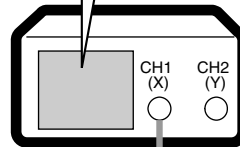
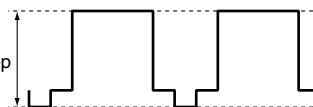


VR7504
(AV BOARD Assy)



Adjust TP7502 to $1.0 \pm 0.05V_{p-p}$

$1.0 \pm 0.05V_{p-p}$



Oscilloscope

TP7502
(AV BOARD Assy)

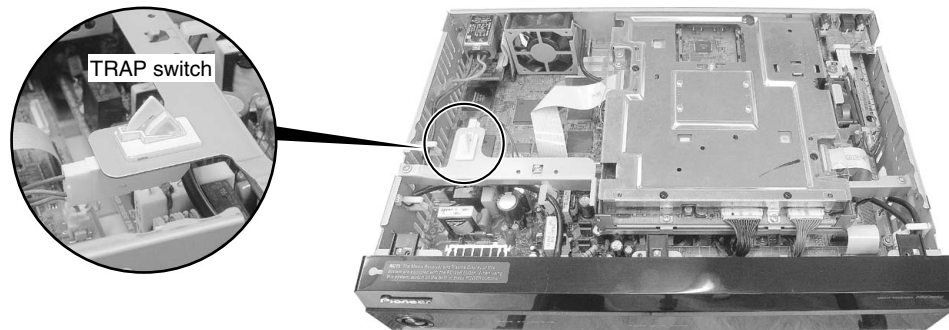
6.5 TRAP SWITCH

● Outline and Notes

For video data transmission from the Media Receiver to the PDP-435HD and PDP-505HD-series Plasma Displays, digital signals are used. Therefore, this unit adopts the HDCP (High-bandwidth Digital Content Protection) system for copyright protection. This unit is also provided with a detection switch (TRAP switch) that will prohibit the unit from being turned on again "if the upper plate of the unit is accidentally opened," in order to prevent the panel technology from being leaked out.

The TRAP switch is disabled while the unit is turned off.

When performing internal diagnosis of the PDP, fix the switch to the OFF position using adhesive tape before turning on the unit. After servicing, be sure to remove the adhesive tape.



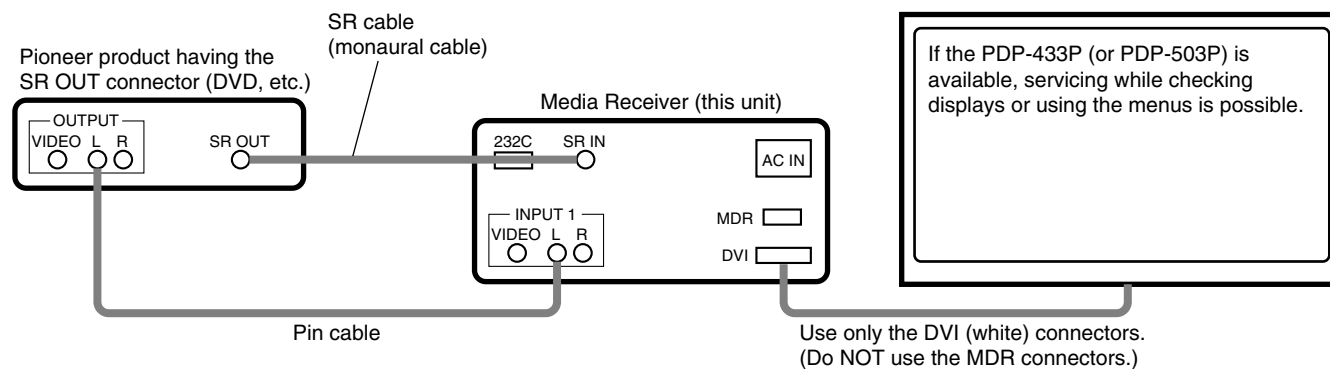
6.6 SERVICING USING ONLY THE MEDIA RECEIVER

For servicing of the PDP-435HD and PDP-505HD-series Plasma Display using only the Media Receiver, the following two methods can be used:

● Remote controlling using SR connections (Except PDP-R05FE)

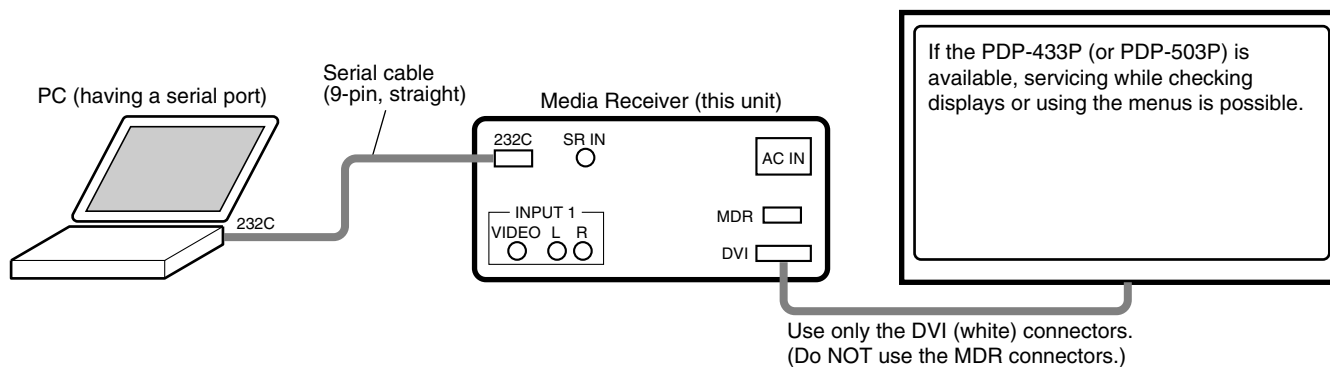
About connections

- Connect the SR OUT connector of a Pioneer product having that connector (a DVD in the following example) and the SR IN connector of the Media Receiver, using the SR cable. As the remote control sensor is not provided with the Media Receiver, this connection is required for using the remote control unit if the panel is not available. In this case, aim the remote control unit at the remote control sensor of the device (DVD in this case).
- Connect either the audio or the video output of the device (DVD in the example) and the corresponding audio or video input of the Media Receiver, using a cable with phono plugs. This connection is required in order to use ground in common with the SR cable, because with the SR cable connection the ground connection for signal reference is not available. In the example, the audio L channel is used, but the audio R channel or video can be used instead.
- If the plasma display for a previous model, such as the PDP-433P or PDP-503P, is available, servicing while checking displays or using the menus is possible. For this, connect only the DVI connectors (white) of the Media Receiver and the plasma display. The MDR connector of the Media Receiver must not be used, even though it has the same shape and number of pins, because signals assigned to the connectors differ. Using the MDR connector may damage the unit.



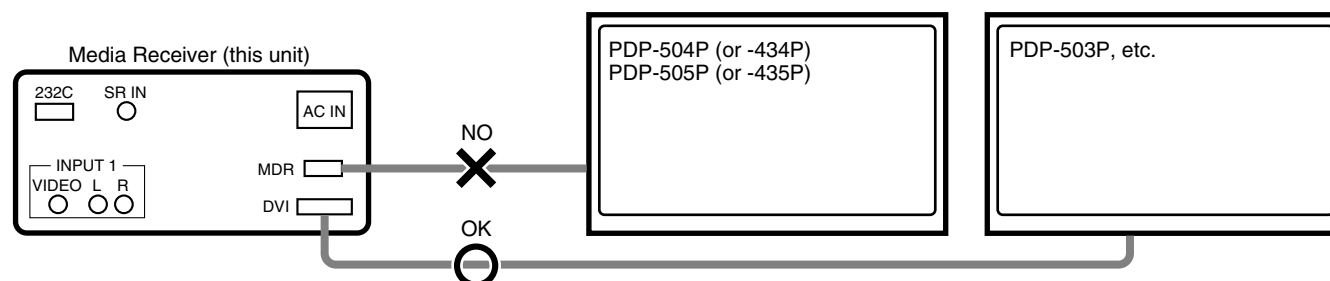
● RS-232C control using a PC

In this case the setting is RS-232C 38400bps, and the setting of "6.3. USING RS-232C COMMANDS" is not related. Please set baud rate of PC in 38400bps. For connection with the PC, use a straight cable.



● Note on connection

If the MDR connector of the PDP-434HD or -504HD-series is used, it is considered that the PDP-434P (or -504P) is connected, and the Media Receiver operates on such precondition, **which may result in a failure of the Media Receiver. Be sure not to connect to the MDR connector.** (Do NOT use the MDR connector when servicing the Media Receiver alone.)



6.7 SERVICE FACTORY MODE

To operate in Service Factory mode, use the supplied remote control unit.

How to enter Service Factory Mode

Please refer to the technical documentation (Service Know-How). same as

Operation in Service Factory mode

Functions whose settings are set to OFF

The settings for the following functions are set to OFF when Service Factory mode is entered (including when the "FAY" command is received):

- Two-screen operations (input function set on the main side is selected)
- P ZOOM
- STILL
- Detection of the TRAP switch (The log in the EEPROM is retained.)

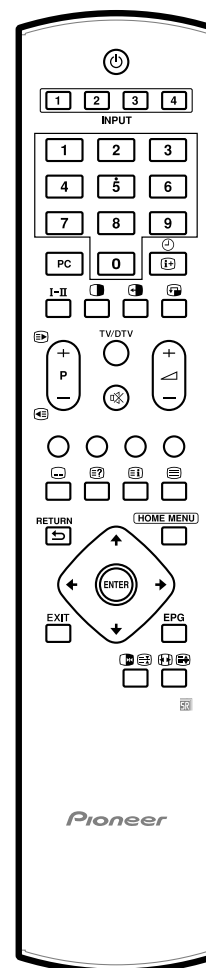
User data

User data will be treated as follows:

- User data on picture- and audio-quality adjustments are not reflected (data stored in memory will be retained).
- Data on screen position are reset to the default values (data stored in memory will be retained).

Remote control codes in Service Factory mode

SR Function	Main Function	Remarks
Muting	Switching the main items	Shifting to the next main item
DOWN	Switching the subtitled items	Shifting downward to the next subtitled item
UP	Switching the subtitled items	Shifting upward to the next upper layer
LEFT	Increasing the adjustment value	Increasing the adjustment value
RIGHT	Decreasing the adjustment value	Decreasing the adjustment value
SET	Switching layers	Shifting downward or upward to the next lower or upper layer
INPUT	Selecting input	Shifting the input to the next function
INPUTxx	Selecting input	Switching the input to xx
CH+	Increasing the channel number	Advancing a preset channel (effective when Function is set to TV)
CH-	Decreasing the channel number	Turning a preset channel backward (effective when Function is set to TV)
Numeric keys	Function: TV	Function: TV (previously selected channel number is selected)
POWER	Power OFF	Turning the power off
FACTORY	Factory OFF	Turning Service Factory mode off
MENU	Menu ON	Turning Service Factory mode off and Menu mode on



Changes of the Service Factory menus

A

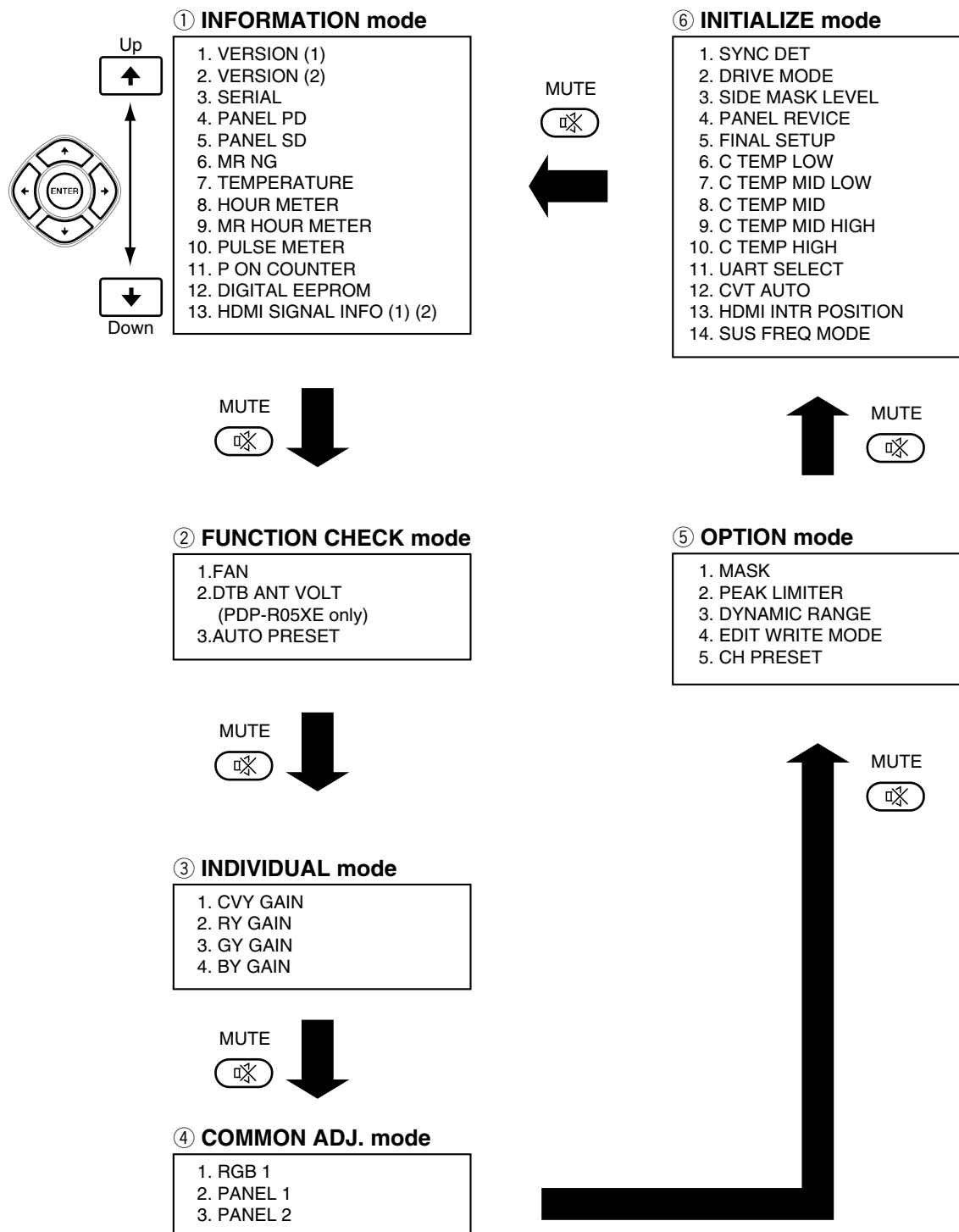
B

C

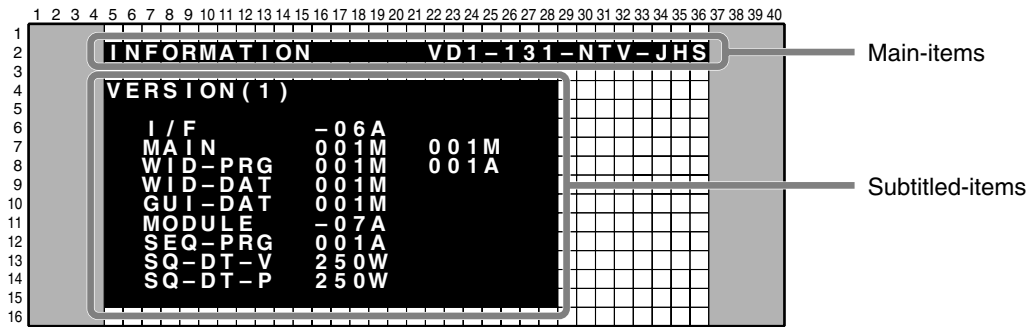
D

E

F

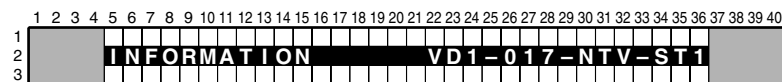


■ Indications in Service Factory mode



■ Main-item indications

Four parameters are displayed:



1 Input function

Input Functions	On-Screen Display
INPUT1	VD1
Analog	AIR
DTV	ARD
PC	PC

2 SIG mode and screen size

Note: See SIG-Mode Tables. (See next page.)

3 Color system and signal type

Color System and Signal Type		On-Screen Display
NTSC	Composite input/ S-connector input	NTV
PAL		PLV
SECAM		SCV
4.43NTSC		4NV
BLACK/WHITE		BWV
Y / CB / CR		CBR
Y / PB / PR		PBR
RGB		RGB
Digital video signal		DIG

4 Option (Destination, etc.)

Options	On-Screen Display
Advanced : PDP-R05XE	EHS
Standard : PDP-R05E	ETS
Basic : PDP-R05FE	EBS

● SIG-Mode Table

A The signal mode is displayed in three characters:

First character: Resolution of the input signal (numerics for the video signals, and alphabets for the PC signals)

Second character: Grouping of the V frequencies

SIG-Mode table for video signals (resolutions and V frequencies)

SIG-Mode	Signal Type	Vertical Frequency fv (Hz)	Horizontal Frequency fh (kHz)
13*	SDTV • 525i	60.000	15.750
21*	SDTV • 625i	50.000	15.625
33*	SDTV • 525p	60.000	31.500
41*	HDTV • 1125i	50.000	28.125
43*		60.000	33.750
51*	SDTV • 625p	50.000	31.250
61*	HDTV • 750p	50.000	37.500
63*		60.000	45.000

SIG-Mode table for PC signals (resolutions and V frequencies)

SIG-Mode	Signal Type	Vertical Frequency fv (Hz)	Horizontal Frequency fh (kHz)
A2*	720 × 400	56.000	24.825
A5*		70.087	31.469
A8*		85.050	37.861
B3*	640 × 480	59.940	31.469
B4*		66.666	35.000
B6*		72.809	37.861
B7*		75.000	37.500
B8*		85.000	43.300
C3*	852 × 480	60.000	31.680
D2*	800 × 600	56.250	35.1556
D3*		60.317	37.879
D6*		72.188	48.077
D7*		75.000	46.875
D8*		85.061	53.674
E7*	832 × 624	74.550	49.725
F3*	1024 × 768	60.004	48.363
F5*		70.069	56.476
F7*		75.029	60.023
F8*		84.997	68.677
G2*	1280 × 768	56.250	45.113
G3*		59.833	47.986
G5*		70.000	56.137

2nd Character	Reference V Frequency	Remarks
–	–	No signal
1	50	
2	56	
3	60	
4	66	
5	70	
6	For interpolation of 72-Hz area	For distinguishing between 70-Hz or 75-Hz area
7	75	
8	85	
9 (spare)	–	
?	–	Out of range

Third character: Selection of the screen size by the user is displayed.
 (○: available, ×: not available)

3rd Character	Description on GUI	VIDEO	PC	Remarks
0	DOT BY DOT	×	○	
1	4 : 3	○	○	
2	FULL (FULL1)	○	○	
3	ZOOM	○	×	
4	CINEMA	○	×	
5	WIDE	○	×	Indude WIDE-HD
6	FULL 14 : 9	○	×	
7	CINEMA 14 : 9	○	×	
8	FULL2	○	○	HDTV1035i
9	OVERSCAN	○	×	

① INFORMATION mode

● Operation items

No.	Function / Display	Content
1	VERSION (1)	The flash memory versions for each device are displayed. (common part)
2	VERSION (2)	The flash memory versions for each device are displayed. (individual part)
3	SERIAL	For displaying the serial number of the product (not used)
4	PANEL PD	Power-down generated on the panel side and its time of occurrence are displayed.
5	PANEL SD	Shutdown generated on the panel side and its time of occurrence are displayed.
6	MR NG	Power-down and/or shutdown generated on the Media Receiver side and their/its time of occurrence are displayed.
7	TEMPERATURE	Information on temperature is displayed.
8	HOUR METER	Cumulative power-on time to the panel is displayed.
9	MR HOUR METER	Cumulative power-on time to the Media Receiver is displayed.
10	PULSE METER	The pulse meter value on the panel side is displayed.
11	P ON COUNTER	The number of times the power to the panel was turned on is displayed.
12	DIGITAL EEPROM	The status of the backup data for the module microcomputer is displayed.
13	HDMI SIGNAL INFO. (1) (2)	The file information of HDMI series are displayed.

1. VERSION (1)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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Flash memory of Device	On-Screen Display
User IF microcomputer (MR: IC8702)	I / F
Main microcomputer (MR: IC7207)	MAIN
Program for IC 3 (MR: IC7101)	WID-PRG
Enhanced data for IC 3 (MR: IC7101)	WID-DAT
GUI data for IC 3 (MR: IC7101)	GUI-DAT
Module microcomputer (for the PDP)	MODULE
Program for IC 4 (for the PDP)	SEQ-PRG
Sequence data for IC 4 Video	SQ-DT-V
Sequence data for IC 4 PC	SQ-DT-P

2. VERSION (2)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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Device	Name Display	Version Display	Remarks
DTV Software Version	DTB	4 character	PDP-R05XE only
PC Card Software Version	CARD	8 character	Except PDP-R05FE
Teletext ucom Software Version	TEXT	60 character	
USER Password	PASSWORD	4 character	

4. PANEL PD

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
1	INFORMATION															VD1-013-NTV-ST1																								
2																																								
3																																								
4	PANEL PD																																							
5	FIRST															SECOND																								
6																																								
7	1	X-DRV										POWER										00523H51M																		
8	2	Y-SUS										Y-DCDC										00275H42M																		
9	3	SCAN										----										00090H50M																		
10	4	Y-DCDC										POWER										00043H03M																		
11	5	SCN-5V										POWER										00002H31M																		
12	6	ADRS										----										00000H07M																		
13	7																					H M																		
14	8																					H M																		
15																																								
16																																								

Power-down information only on the panel side is displayed.

• Panel power-down information

No.	Type of Power-down	On-Screen Display	No.	Type of Power-down	On-Screen Display
1	No corresponding item	-----	8	Power-down of the address system	ADRS
2	Power-down of the main power supply system	POWER	9	Power-down of the X-DRIVE circuitry	X-DRV
3	Power-down of the scanning system	SCAN	A	Power-down of the X-DC/DC converter	X-DCDC
4	Power-down in the path between the scanning system and 5-V power supply	SCN-5V	B	Power-down of the X-SUS system	X-SUS
5	Power-down of the Y-Drive system	Y-DRV	C	Power-down of the driving IC power supply system	D-DCDC
6	Power-down of the Y-DC/DC converter	Y-DCDC	D	Power-down of the driving stopped	IC4 (IC5401)
7	Power-down of the Y-SUS system	Y-SUS	F	Power-down point unidentified	UNKNOWN

5. PANEL SD

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40																																		
1	INFORMATION															VD1-013-NTV-ST1																																																									
2	PANEL SD																																																																								
3	MAIN															SUB																																																									
4	1	AUDIO										----	00103H51M																																																												
5	2	MD-IIC										VOLIC	00075H42M																																																												
6	3	TEMP1										----	00050H50M																																																												
7	4												H M																																																												
8	5												H M																																																												
9	6												H M																																																												
10	7												H M																																																												
11	8												H M																																																												
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The shutdown log only on the panel side is displayed.

• Panel shutdown information

No.	Type of Shutdown	On-Screen Display (MAIN)	Remarks
1	Abnormality in IC 4 communication	IC4	
2	Abnormality in module microcomputer IIC communication	MD-IIC	Subcategories exist. (EROM4K : IC5206, EROM2K : IC402, VOLIC : IC3502)
3	Abnormality in RST2	RST2	
4	Abnormality in panel temperature	TEMP1	
5	Short-circuiting of the speakers	AUDIO	

C

B

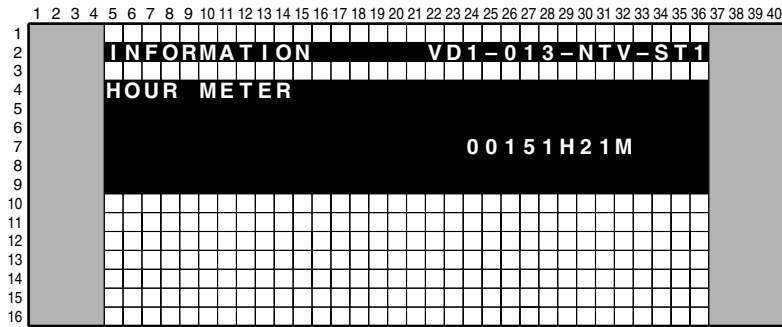
D

E

F

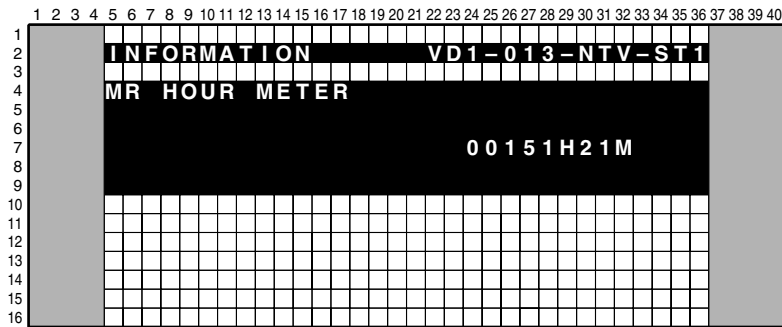
4

8. HOUR METER



The cumulative power-on time of the panel is displayed.

9. MR HOUR METER



The cumulative power-on time of the Media Receiver is displayed.

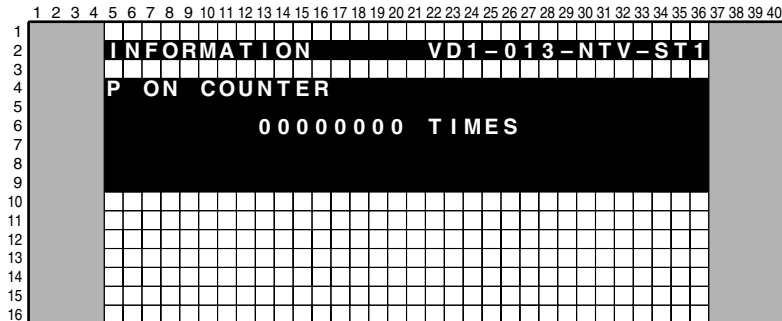
10. PULSE METER



The cumulative number of pulses of the panel is displayed.

Note : Dividing screen into sixteen times sixteen and counting five different locations on a screen.
Each item, it's counted total 3840 pixels (for 50 inch) or 3072 pixels (for 43 inch) discharging.
(1280/16 x 768/16 = 3840, 1204/16 x 768/16 = 3072)

11. P ON COUNTER



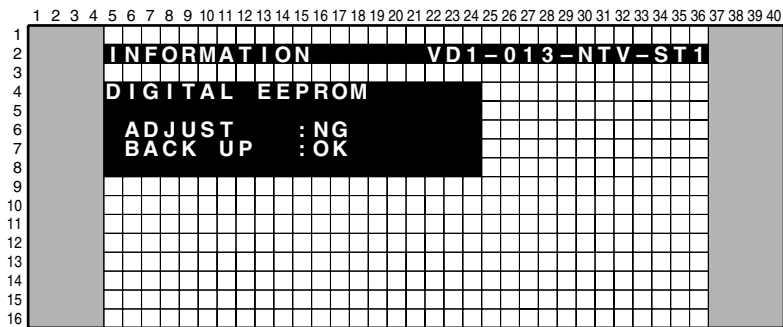
The cumulative number of times the panel was turned on is displayed.

12. DIGITAL EEPROM

- A When the DIGITAL Assy of the PDP is to be replaced, the adjustment values in it can be temporarily stored in the ROM then be written on the new Assy after replacement.

Whether adjustment has been made on the DIGITAL Assy of the PDP or not (i.e., in the state of a new service part), and whether the data on any adjustment values are retained in the backup ROM or not are displayed.

B



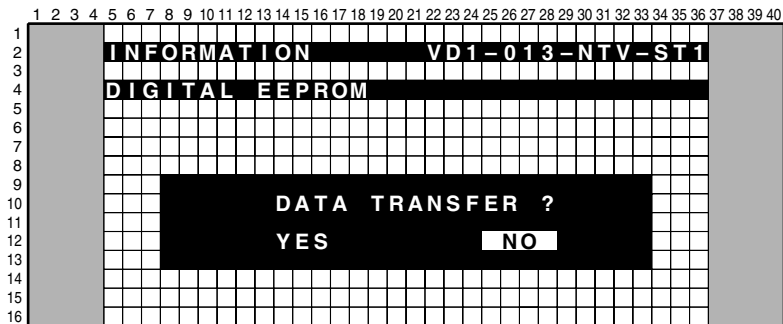
• Downloading the data from the backup ROM

(This must be performed after the DIGITAL Assy is replaced.)

C

To download the data from the backup ROM, press the ENTER key while the above screen is displayed. The display changes as shown below. Move the cursor to YES then press the ENTER key. The data in the backup ROM are downloaded into the new Assy.

D

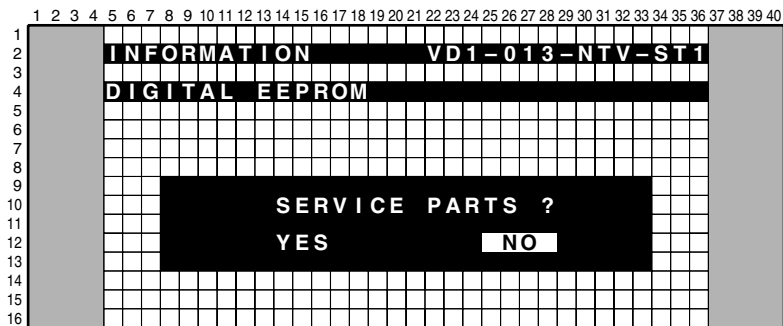


E

• Clearing the data in the ROM of the DIGITAL Assy

The display below is automatically displayed after either YES or NO is selected on the display shown above. Move the cursor to YES then press the ENTER key. Then all data on adjustment values in the ROM of the DIGITAL Assy are cleared.

F



13. HDMI SIGNAL INFO

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
2	INFORMATION															VD1-131-NTV-JHS																								
3																																								
4	HDMI SIGNAL INFO 1																																							
5																																								
6	0 x 6 0										- 4 E : 0 0										0 x 6 8										- 4 5 : 0 0									
7											- 4 F : 0 0																				- 4 6 : 0 0									
8											- 5 0 : 0 0																				- 4 7 : 0 0									
9											- 5 1 : 0 0																				- 4 8 : 0 0									
10											- 5 5 : 0 0																				- 8 4 : 0 0									
11	0 x 6 8										- 2 A : 0 0																				- 8 5 : 0 0									
12											- 3 0 : 0 0																				- 8 6 : 0 0									
13											- 3 1 : 0 0																				- 8 7 : 0 0									
14											- 4 4 : 0 0																				- 8 8 : 0 0									
15																																								
16																																								

Technical examination display

(Reading status registers in HDMI receiver and displaying them by HEX value.)

[illegible]

For technical discussion

② FUNCTION CHECK

A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
2	FUNCTION CHECK VD1-131-NTV-JHS																																						
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15	FAN<=> : MIN																																						
16																																							

No last memory in this menu

B

No.	Display	Detail	Remarks	232C Command
1	FAN <=>	MIN ⇔ CNT ⇔ MAX		*1
2	DTB ANT VOLT <=>	OV ⇔ 5V		BAV + $\begin{matrix} S00 : 0V \\ S02 : 5V \end{matrix}$
3	AUTO PRESET <=>	NO ⇔ YES		

2.1 FAN

Controls FAN speed by force. (MIN : STOP, CNT : Follows movement specifications, MAX : High)
Temp sensor is working only displaying data value in service factory mode.

C

After getting off service factory mode, this function is set to normal automatically.

2.2 DTB ANT VOLT (PDP-R05XE only)

Change the power supply voltage for the digital tuner antenna.

This setting item is not recorded in the memory. Return in the user setting when finish the factory mode.

2.3 AUTO PRESET

Make the frequency range narrow for shipment check, and auto preset.

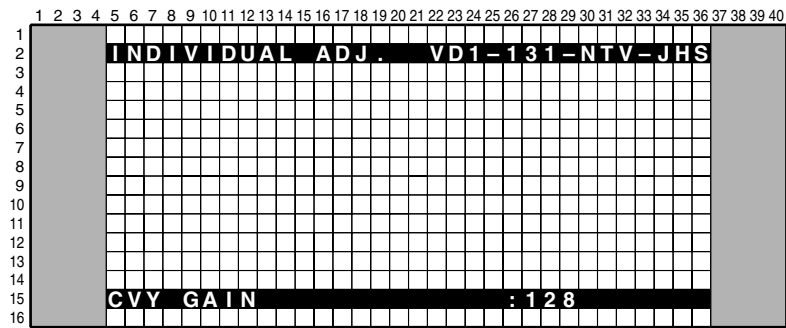
D

E

F

③ INDIVIDUAL ADJ. mode

AV Board



- Each signal course output from AV Board is revised to become equally.
- The main course and the assistant course are managed individually.
- At the time of signal input to go through IC1 side, AD side menu is done graydown by the kind of the signal.
At the time of signal input to go through AD side, IC1 side menu is done graydown of alike.
And at the time of digital signal input, all menu is done graydown.

No.	OSD Display	Function	Adjustment range	Initial value	Control device
1	CVY GAIN <=>	Input GAIN adjustment of CV/YC series	064-191	128	IC1 0x08B D6-D0
2	RY GAIN <=>	Input GAIN adjustment of component (Cr)/RGB(R) series	000-255	128	AD 0x08B D7-D0
3	GY GAIN <=>	Input AIN adjustment of component (Y)/RGB(G) series	000-255	128	AD 0x08B D7-D0
4	BY GAIN <=>	Input GAIN adjustment of component (Cb)/RGB(B) series	000-255	128	AD 0x08B D7-D0

④ COMMON ADJ. mode

RGB1

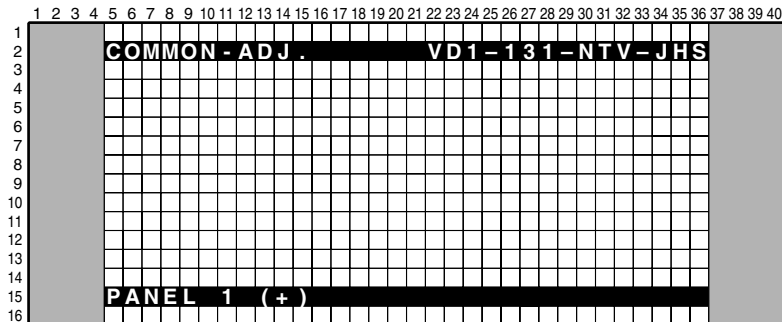
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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- Adjustment of the course dispersion
- Adjustment the input every course so that IC1 and the AD-PLL output make it equal in Main Board.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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No.	OSD Display	Function	Adjustment range	Initial value	Control device
1	IC1 MAIN GAIN <=>	MAIN side IC1 input-GAIN adjustment	064-191	128	IC1(M) 0x08B D6-D0
2	IC1 MAIN OFFSET <=>	MAIN side IC1 input-OFFSET adjustment	064-191	128	IC1(M) 0x08C D6-D0
3	AD MAIN R GAIN <=>	MAIN side AD/PLL input-R GAIN adjustment	000-255	128	A/D(M) 0x08 D7-D0
4	AD MAIN G GAIN <=>	MAIN side AD/PLL input-G GAIN adjustment	000-255	128	A/D(M) 0x09 D7-D0
5	AD MAIN B GAIN <=>	MAIN side AD/PLL input-B GAIN adjustment	000-255	128	A/D(M) 0x0A D7-D0
6	AD MAIN R OFFSET <=>	MAIN side AD/PLL input-R OFFSET adjustment	064-191	128	A/D(M) 0x0B D7-D1
7	AD MAIN G OFFSET <=>	MAIN side AD/PLL input-G OFFSET adjustment	064-191	128	A/D(M) 0x0C D7-D1
8	AD MAIN B OFFSET <=>	MAIN side AD/PLL input-B OFFSET adjustment	064-191	128	A/D(M) 0x0D D7-D1
9	IC1 SUB GAIN <=>	SUB side IC1 input-GAIN adjustment	064-191	128	IC1(S) 0x08B D6-D0
10	IC1 SUB OFFSET <=>	SUB side IC1 input-OFFSET adjustment	064-191	128	IC1(S) 0x08C D6-D0
11	AD SUB R GAIN <=>	SUB side AD/PLL input-R GAIN adjustment	000-255	128	A/D(S) 0x08 D7-D0
12	AD SUB G GAIN <=>	SUB side AD/PLL input-G GAIN adjustment	000-255	128	A/D(S) 0x09 D7-D0
13	AD SUB B GAIN <=>	SUB side AD/PLL input-B GAIN adjustment	000-255	128	A/D(S) 0x0A D7-D0
14	AD SUB R OFFSET <=>	SUB side AD/PLL input-R OFFSET adjustment	064-191	128	A/D(S) 0x0B D7-D1
15	AD SUB G OFFSET <=>	SUB side AD/PLL input-G OFFSET adjustment	064-191	128	A/D(S) 0x0C D7-D1
16	AD SUB B OFFSET <=>	SUB side AD/PLL input-B OFFSET adjustment	064-191	128	A/D(S) 0x0D D7-D1

PANEL1

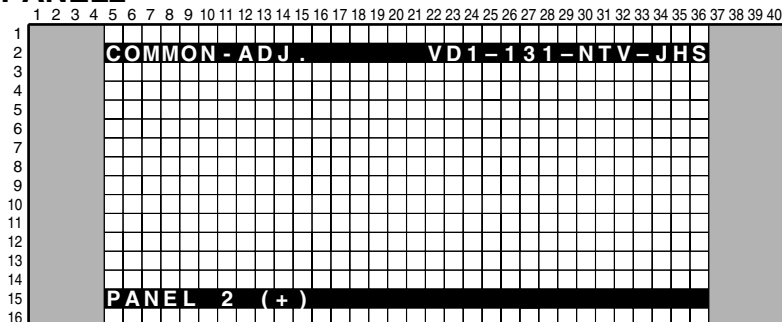


• related 232C command
XU1/XU2/XD1/XD2
YU1/YU2/YD1/YD2/YD3/YD4
VSU/VOF
GAJ/GA2

- Adjust Drive/Power supply series

No.	OSD Display	Function	Adjustment range	Corresponding RS-232C Command
1	X-SUS U1 <=>	X-SUS wave form Adjustment U1	124-132	XU1***
2	X-SUS U2 <=>	X-SUS wave form Adjustment U2	124-132	XU2***
3	X-SUS D1 <=>	X-SUS wave form Adjustment D1	124-132	XD1***
4	X-SUS D2 <=>	X-SUS wave form Adjustment D2	124-132	XD2***
5	Y-SUS U1 <=>	Y-SUS wave form Adjustment U1	124-132	YU1***
6	Y-SUS U2 <=>	Y-SUS wave form Adjustment U2	124-132	YU2***
7	Y-SUS D1 <=>	Y-SUS wave form Adjustment D1	124-132	YD1***
8	Y-SUS D2 <=>	Y-SUS wave form Adjustment D2	124-132	YD2***
9	Y-SUS D3 <=>	Y-SUS wave form Adjustment D3	124-132	YD3***
10	Y-SUS D4 <=>	Y-SUS wave form Adjustment D4	124-132	YD4***
11	VLT-SUS <=>	Vsus voltage adjustment	000-255	VSU***
12	VLT-OFS <=>	Vofs voltage adjustment	000-255	VOF***

PANEL2



• related 232C command
PMC/PRH/PGH/PBH
PMB/PRL/PGL/PBL
ABL
GPW
GAJ

- Panel white balance, indication of ABL value and adjustment
- About < PANEL CONTRAST > and < PANEL BRIGHTNESS >, it is assumed that can adjust it when connected the fifth generation panel. It is done graydown when connected the fourth generation panel, and only indication of a value.

No.	OSD Display	Function	Adjustment range	Table indication	Corresponding RS-232C Command
1	PANEL CONTRAST <=>	Panel WB Adjustment - Main contrast	000-511	---	PMC***
2	PANEL R HIGH <=>	Panel WB Adjustment - R highlight	000-511	PT1/PT2/PT3	PRH***
3	PANEL G HIGH <=>	Panel WB Adjustment - G highlight	000-511	PT1/PT2/PT3	PGH***
4	PANEL B HIGH <=>	Panel WB Adjustment - B highlight	000-511	PT1/PT2/PT3	PBH***
5	PANEL BRIGHTNESS <=>	Panel WB Adjustment - Main Brightness	000-999	---	PMB***
6	PANEL R LOW <=>	Panel WB Adjustment - R low light	000-999	PT1/PT2/PT3	PRL***
7	PANEL G LOW <=>	Panel WB Adjustment - G low light	000-999	PT1/PT2/PT3	PGL***
8	PANEL B LOW <=>	Panel WB Adjustment - B low light	000-999	PT1/PT2/PT3	PBL***
9	ABL LEVEL <=>	ABL Adjustment	000-255	AB1/AB2/AB3	ABL***

⑤ OPTION mode

A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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No.	Function/Display	Content	Corresponding RS-232C Command
1	MASK (+)	Selecting the pattern mask of IC4	MSK
2	PEAK LIMITTER	ON ⇔ OFF	PLT
3	DYNAMIC RANGE	ON ⇔ OFF	DYR
4	EDID WRITE MODE	DISABLE ⇔ ENABLE	EPA
5	CH PRESET	FACTORY ⇔ USER	

C

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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D

The mask frequency can be cyclically changed (see the table below) by pressing the left or right cursor key. The mask pattern can be cyclically changed by pressing the up or down cursor key. Approximately 2 seconds after either the up or down cursor key is pressed, the mask screen will appear.

• Frequency selection while the mask is displayed

No.	Function/Display	Content	Corresponding RS-232C Command
0	V50	Video 50-Hz sequence	F50
1	V60 (initial value)	Video 60-Hz sequence	F60
2	P60	PC 60-Hz sequence	F61
3	P70	PC 70-Hz sequence	F70
4	V72	Video 72-Hz sequence	F72
5	V75	Video 75-Hz sequence	F75

E

F

⑥ INITIALIZE mode

(For managing switching of the initial settings and destination setting)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1																																							
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No.	Function/Display	Content
1	SYNC DET (+)	
2	DRIVE MODE (+)	
3	SIDE MASK LEVEL (+)	
4	PANEL REVICE (+)	
5	FINAL SETUP (+)	
6	C TEMP LOW (+)	
7	C TEMP MID LOW (+)	
8	C TEMP MID (+)	
9	C TEMP MID HIGH (+)	
10	C TEMP HIGH (+)	
11	UART SELECT <=>	1200-232C ⇔ *** ⇔ 38400-232C ⇔ 9600-SR+
12	CVT AUTO <=>	DISABLE ⇔ ENABLE (For Factory use)
13	HDMI INTR POSITION(+)	
14	SUS FREQ MODE<=>	000⇔ *** ⇔ 007

- When there is a modification log, if the "Display" key is held pressed for at least 3 seconds while the above display is displayed, the modification log will be cleared.

• UART SELECT

Option No.	Function / Display	Operation / Control	Remarks
1 (initial setting)	9600-SR+	To set to SR+ (9600 BPS)	For switching external communication between RS-232C and SR+
2	1200-232C	To set to RS-232C (1200 BPS)	
3	2400-232C	To set to RS-232C (2400 BPS)	
4	4800-232C	To set to RS-232C (4800 BPS)	
5	9600-232C	To set to RS-232C (9600 BPS)	
6	19200-232C	To set to RS-232C (19200 BPS)	
7	38400-232C	To set to RS-232C (38400 BPS)	

Tips: How to change the SR+/RS-232C setting without entering Service Factory mode
Refer to "6.3 USING RS-232C COMMANDS".

6.8 LIST OF RS-232C COMMANDS

RS-232C commands can be used in Service Factory mode.

Before using RS-232C commands, it is necessary to change the factory presetting. See "6.3. USING RS-232C COMMANDS."

Command	Operation	Remarks
A		
ABL	Adjusting power consumption	
B		
BCP	Transmitting the backup data to the DIGITAL Assy	
BAVS00	Setting the power supply for the DTB antenna to 0 V	PDP-R05XE only
BAVS02	Setting the power supply for the DTB antenna to 5 V	PDP-R05XE only
BSL	Adjusting side mask B	
BYG	BY GAIN	
C		
CHM	Clearing the hour meter	
CNG	Clearing MR NG information	
CPC	Clearing the power-on counter	
CPD	Clearing power-down information	
CPM	Clearing the pulse meter	
CSD	Clearing shutdown information	
CTM	Clearing the modification log	This command is effective even during Standby mode.
D		
OSDS01	Turning on the on-screen display	While the OSDSOI command is in force, the duration of on-screen display is unlimited.
OSDS00	Turning off the on-screen display	On-screen display is prohibited.
DRF	Turning off the power for the drive system	
DRN	Turning on the power for the drive system	
DW*	Decreasing the adjustment value by *	*: 1-9, 0 (0 means 10), or F (making the adjustment value the minimum)
E		
EDWS00	Prohibiting writing of EDID data	
EDWS01	Permitting writing of EDID data	
F		
F50	Video 50-Hz sequence	
F60	Video 60-Hz sequence	
F61	PC 60-Hz sequence	
F70	PC 70-Hz sequence	
F72	Video 72-Hz sequence	
F75	Video 75-Hz sequence	
FAJ	Determining the adjustment values for the unit	
FAY	Turning Service Factory mode on	
FAN	Turning Service Factory mode off	The GUI equivalent to that usually displayed when the power is turned on is displayed.
FCSS00	Focus OFF	
FCSS01	Focus ON	
FST	Final set up	
G		The GET-group commands are effective at any time, including during Standby mode.
GA2	Obtaining the various adjustment values (Add Vrn to GAJ)	
GAJ	Obtaining the adjustment values for the panel	
GDI	Command to obtain Status	
GMM	Switching the gamma levels	Setting value: 000-007
GNG	Obtaining NG data of the MR	
GNM	Obtaining the serial No. of the MR	
GNP	Obtaining the serial No. of the panel	
GPC	Obtaining the P ON COUNTER value	
GPD	Obtaining power-down information	
GPR	Obtaining the PANEL REVISE data	
GPM	Obtaining the PULSE METER data	
GPW	Obtaining the PANEL W/B data	
GS1	Obtaining the version data for each device	
GS2	Obtaining data on various operations	
GS6	Obtaining the any version	
GSD	Obtaining shutdown information	
GSL	Adjusting side mask G	
GYG	GY GAIN	

Command	Operation	Remarks
I		
INC***	Selection of the tuner for terrestrial digital signals	PDP-R05XE only
INH	Selection of SD card/PCMCIA card	PDP-R05XE and PDP-R05E only
INPS01	Input selection: Input 1	
INPS02	Input selection: Input 2	
INPS03	Input selection: Input 3	
INPS04	Input selection: Input 4	
INPS05	Input selection: Input 5	PDP-R05XE and PDP-R05E only
INA	Selection of the tuner for terrestrial analog signals	
L		
LCD	Liquid crystal mode of MR alone	
M		
MSKS00	Mask mode: OFF	
MSKS01	White: 0-100%	
MSKS02	Aging mask	
MSKS03	Aging mask (detection of still picture: OFF)	
MSKS10	RAMP slant 1	
MSKS11	RAMP slant 4	
MSKS12	RAMP slant 1 shifting	
MSKS13	RAMP slant 4 shifting	
MSKS14	V RAMP	
MSKS15	H/V RAMP	
M1G	IC1 MAIN GAIN	
M1O	IC1 MAIN OFFSET	
MSKS20	WINDOW-Low: 102 / High: 870	
MSKS21	WINDOW-Low: 102 / High: 1023	
MSKS22	WINDOW-Low: 0 / High: 1023	
MSKS23	WINDOW-High: 1023 (CENTER)	
MSKS24	WINDOW-PEAK WINDOW	Area 1.25%
MSKS25	WINDOW-1/7 vertical window	
MSKS26	WINDOW-magenta/green stripe	
MSKS27	WINDOW-green/magenta stripe	
MSKS28	Window (black & white [1 × 8], checkered pattern [for EMG check])	
MSKS29	Window (for W/B adjustment, magenta, yellow)	
MSKS40	Wiper to prevent phosphor burn	
MSKS30	COLOR BAR	
MSKS31	Slanted lines	
MSKS51	Raster-white	
MSKS52	Raster-red	
MSKS53	Raster-green	
MSKS54	Raster-blue	
MSKS55	Raster-black	
MSKS56	Raster-cyan	
MSKS57	Raster-magenta	
MSKS58	Raster-yellow	
MSKS59	Raster-cyan 274	
MSKS60	Raster-50 flesh color	
MSKS61	Raster-50 light purple	
MSKS62	Raster-50 sky blue	
MSKS63	Raster-red 779	
MSKS64	Raster-cyan 218	
MSKS65	Raster-cyan 448	
MSKS66	Raster-43 flesh color	
MSKS67	Raster-red 640	
MSKS68	Raster-magenta 98	
MSKS69	Raster-43 sky blue 1	
MSKS70	Raster-43 sky blue 2	
MSKS71	Raster-43 light purple	
MSKS72	Raster-blue 960	
MSKS73	Raster-gray 511 (spare)	
MSKS74	Raster-gray 511 (spare)	

A

Command	Operation	Remarks
M		
MRG	AD MAIN R GAIN	
MRO	AD MAIN R OFFSET	
MGG	AD MAIN G GAIN	
MGO	AD MAIN G OFFSET	
MBG	AD MAIN B GAIN	
MBO	AD MAIN B OFFSET	
P		
PBH	Panel W/B B-HIGH adjustment	
PBL	Panel W/B B-LOW adjustment	
PGH	Panel W/B G-HIGH adjustment	
PGL	Panel W/B G-LOW adjustment	
POF	Turning the power OFF	
PON	Turning the power ON	
PRH	Panel W/B R-HIGH adjustment	
PRL	Panel W/B R-LOW adjustment	
R		
RYG	RY GAIN	
RSL	Adjustment of side mask R	
S		
S1G	IC1 SUB GAIN	
S1O	IC1 SUB OFFSET	
SBG	AD SUB B GAIN	
SBO	AD SUB B OFFSET	
SFI	Initialization of the full mask table	
SGG	AD SUB G GAIN	
SGO	AD SUB G OFFSET	
SRG	AD SUB R GAIN	
SRO	AD SUB R OFFSET	
T		
TSN	Not enabling the TRAP switch	
TSY	Enabling the TRAP switch	The command is effective even during Standby mode.
U		
UP*	Increasing the adjustment value by *	*: 1-9, 0 (0 means 10), or F (making the adjustment value the maximum)
UAJ	Resetting all data in the DIGITAL Assy to those of a new service part	
V		
VMTS00	Panel Mute OFF	
VMTS01	Panel Mute ON	
VOF	Offset voltage adjustment	
VSG	CVY GAIN	
VSU	SUS voltage adjustment	
X		
XD1	D1 trailing-edge pulse of X-SUS	
XD2	D2 trailing-edge pulse of X-SUS	
XU1	U1 leading-edge pulse of X-SUS	
XU2	U2 leading-edge pulse of X-SUS	
Y		
YD1	D1 trailing-edge pulse of Y-SUS	
YD2	D2 trailing-edge pulse of Y-SUS	
YD3	D3 trailing-edge pulse of Y-SUS	
YD4	D4 trailing-edge pulse of Y-SUS	
YU1	U1 leading-edge pulse of Y-SUS	
YU2	U2 leading-edge pulse of Y-SUS	

F

GET Commands

GS1: Returning information on the model and the version of the software

Order	Data	Size
1	Data on the display	3 bytes
2	Version of the module microcomputer	4 bytes
3	Version of the IC4-MANTA	4 bytes
4	Sequence version (50VIDEO)	4 bytes
5	Sequence version (50PC)	4 bytes
6	Sequence version (43VIDEO)	4 bytes
7	Sequence version (43PC)	4 bytes
8	Version of the IF microcomputer	4 bytes
9	Version of the main microcomputer boot Software	4 bytes
10	Version of the main microcomputer	4 bytes
11	Version of the IC3 boot Software	4 bytes
12	Version of the IC3 Program	4 bytes
13	Version of the IC3 Enhanced	4 bytes
14	Version of the IC3 GUI	4 bytes

Breakdown of the data on the display

Data	Model
HD5	PDP-505HD series
HD4	PDP-435HD series

GPM: Returning the data of the PDP pulse meter

Order	Data	Size
1	Pulse meter (Block area 1)	10 bytes
2	Pulse meter (Block area 2)	10 bytes
3	Pulse meter (Block area 3)	10 bytes
4	Pulse meter (Block area 4)	10 bytes
5	Pulse meter (Block area 5)	10 bytes

Note: Refer to the service manual of the panel.

GPC: Returning the cumulative number of times the power to the PDP was turned on

Order	Data	Size
1	Power-on counter	8 bytes

• Commands for clearing the logs

Parameter	Corresponding RS-232C Command
PD INFO	CPD
SD INFO	CSD
NG INFO	CNG
HOUR METER	CHM
MR HOUR METER (Only for the system model)	CHR
PULSE METER	CPM
P ON COUNTER	CPC

A **GPD: Returning the power-down data (log) of the PDP**

Order	Data	Size	Order	Data	Size
1	Latest "1st PD" data	1 byte	17	Fifth latest "1st PD" data	1 byte
2	Latest "2nd PD" data	1 byte	18	Fifth latest "2nd PD" data	1 byte
3	Data of hour meter for the latest PD	7 bytes	19	Data of hour meter for the fifth latest PD	7 bytes
4	Data on temperature for the latest PD (TEMP1)	3 bytes	20	Data on temperature for the fifth latest PD (TEMP1)	3 bytes
5	Second latest "1st PD" data	1 byte	21	Sixth latest "1st PD" data	1 byte
6	Second latest "2nd PD" data	1 byte	22	Sixth latest "2nd PD" data	1 byte
7	Data of hour meter for the second latest PD	7 bytes	23	Data of hour meter for the sixth latest PD	7 bytes
8	Data on temperature for the second latest PD (TEMP1)	3 bytes	24	Data on temperature for the sixth latest PD (TEMP1)	3 bytes
9	Third latest "1st PD" data	1 byte	25	Seventh latest "1st PD" data	1 byte
10	Third latest "2nd PD" data	1 byte	26	Seventh latest "2nd PD" data	1 byte
11	Data of hour meter for the third latest PD	7 bytes	27	Data of hour meter for the seventh latest PD	7 bytes
12	Data on temperature for the third latest PD (TEMP1)	3 bytes	28	Data on temperature for the seventh latest PD (TEMP1)	3 bytes
13	Fourth latest "1st PD" data	1 byte	29	Eighth latest "1st PD" data	1 byte
14	Fourth latest "2nd PD" data	1 byte	30	Eighth latest "2nd PD" data	1 byte
15	Data of hour meter for the fourth latest PD	7 bytes	31	Data of hour meter for the eighth latest PD	7 bytes
16	Data on temperature for the fourth latest PD (TEMP1)	3 bytes	32	Data on temperature for the eighth latest PD (TEMP1)	3 bytes

C

• Details on "1st/2nd PD" data

Data	Power-down Point
0	No power-down
1	Not used (for MR-POWER)
2	P-POWER
3	SCAN
4	SCN-5V
5	Y-DRIVE
6	Y-DCDC
7	Y-SUS
8	ADRS
9	X-DRIVE
A	X-DCDC
B	X-SUS
C	DIG-DCDC
D	IC4
F	Power-down point not identified

E

F

GSD: Returning the shutdown data (log) of the PDP

Order	Data	Size	Order	Data	Size
1	Latest SD data	1 byte	17	Fifth latest SD data	1 byte
2	Data of subcategory for the latest SD	1 byte	18	Data of subcategory for the fifth latest SD	1 byte
3	Data of hour meter for the latest SD	7 bytes	19	Data of hour meter for the fifth latest SD	7 bytes
4	Data on temperature for the latest SD (TEMP1)	3 bytes	20	Data on temperature for the fifth latest SD (TEMP1)	3 bytes
5	Second latest SD data	1 byte	21	Sixth latest SD data	1 byte
6	Data of subcategory for the second latest SD	1 byte	22	Data of subcategory for the sixth latest SD	1 byte
7	Data of hour meter for the second latest SD	7 bytes	23	Data of hour meter for the sixth latest SD	7 bytes
8	Data on temperature for the second latest SD (TEMP1)	3 bytes	24	Data on temperature for the sixth latest SD (TEMP1)	3 bytes
9	Third latest SD data	1 byte	25	Seventh latest SD data	1 byte
10	Data of subcategory for the third latest SD	1 byte	26	Data of subcategory for the seventh latest SD	1 byte
11	Data of hour meter for the third latest SD	7 bytes	27	Data of hour meter for the seventh latest SD	7 bytes
12	Data on temperature for the third latest SD (TEMP1)	3 bytes	28	Data on temperature for the seventh latest SD (TEMP1)	3 bytes
13	Fourth latest SD data	1 byte	29	Eighth latest SD data	1 byte
14	Data of subcategory for the fourth latest SD	1 byte	30	Data of subcategory for the eighth latest SD	1 byte
15	Data of hour meter for the fourth latest SD	7 bytes	31	Data of hour meter for the eighth latest SD	7 bytes
16	Data on temperature for the fourth latest SD (TEMP1)	3 bytes	32	Data on temperature for the eighth latest SD (TEMP1)	3 bytes

• Details on the shutdown data

Data	Cause of Shutdown
0	No abnormality
1	IC4 (IC5401)
2	Module microcomputer IIC
3	Abnormality in RST2 (power decrease of DC-DC converter)
4	Panel having abnormally high temperature
5	Audio failure (short-circuiting of the speakers)
6 - F	Spares

• Data on the shutdown subcategories for the module microcomputer IIC

Data	Cause of Shutdown
0	No subcategory
1	EEPROM (4k) (IC5206)
2	EEPROM (2k) (IC4002)
3	Volume IC (IC3502)

NGG: Returning the data (logs) on power-down and shutdown of the Media Receiver

Order	Data	Size	Order	Data	Size
1	Latest NG data	1 byte	17	Fifth latest NG data	1 byte
2	Data of subcategory for the latest NG	1 byte	18	Data of subcategory for the fifth latest NG	1 byte
3	Data of MR hour meter for the latest NG	7 bytes	19	Data of MR hour meter for the fifth latest NG	7 bytes
4	Data on temperature for the latest NG (TEMP2)	3 bytes	20	Data on temperature for the fifth latest NG (TEMP2)	3 bytes
5	Second latest NG data	1 byte	21	Sixth latest NG data	1 byte
6	Data of subcategory for the second latest NG	1 byte	22	Data of subcategory for the sixth latest NG	1 byte
7	Data of MR hour meter for the second latest NG	7 bytes	23	Data of MR hour meter for the sixth latest NG	7 bytes
8	Data on temperature for the second latest NG (TEMP2)	3 bytes	24	Data on temperature for the sixth latest NG (TEMP2)	3 bytes
9	Third latest NG data	1 byte	25	Seventh latest NG data	1 byte
10	Data of subcategory for the third latest NG	1 byte	26	Data of subcategory for the seventh latest NG	1 byte
11	Data of MR hour meter for the third latest NG	7 bytes	27	Data of MR hour meter for the seventh latest NG	7 bytes
12	Data on temperature for the third latest NG (TEMP2)	3 bytes	28	Data on temperature for the seventh latest NG (TEMP2)	3 bytes
13	Fourth latest NG data	1 byte	29	Eighth latest NG data	1 byte
14	Data of subcategory for the fourth latest NG	1 byte	30	Data of subcategory for the eighth latest NG	1 byte
15	Data of MR hour meter for the fourth latest NG	7 bytes	31	Data of MR hour meter for the eighth latest NG	7 bytes
16	Data on temperature for the fourth latest NG (TEMP2)	3 bytes	32	Data on temperature for the eighth latest NG (TEMP2)	3 bytes

• Details on the NG data

Data	Cause of Shutdown
0	No abnormality
1	Power-down of the MR power supply
2	Communication failure of the module microcomputer
3	Three-wire serial communication failure of the main microcomputer
4	IIC communication failure of the main microcomputer
5	Communication failure of the main microcomputer
6	MR having abnormally high temperature
7	Fan stopped
8	Failure of the UART communication
9	Abnormality in RST2 of the MR (power decrease of DC-DC converter)

• Data on the subcategories for failure in 3-wire serial communication of the main microcomputer

Data	Cause of Shutdown
0	No subcategory
1	Communication failure of the IF microcomputer
2	IC2 communication failure
3	IC3 communication failure

• Data on the subcategories for failure in the digital tuner

Data	Cause of Shutdown
0	No subcategory (DTV for North America)
1	Communication failure of the DTV microcomputer (PS/RST)
2	DTV NG (DEVICE)
3	DTV microcomputer (CMD)
4	DTV microcomputer communication (RETRY)
5	PC CARD Communication NG (CD-COM)
6	PC CARD Mdule (CD-DEV)
7	PC CARD Reset NG (CD-RST)

• Data on the subcategories for failure in IIC communication of the main microcomputer

Data	Cause of Shutdown
0	No subcategory
1	EEPROM (128k) (IC7205)
2	GCR (Only domestic model)
3	IC1 main (IC6107)
4	IC1 sub (IC6255)
5	AD-PLL main (IC6402)
6	AD-PLL sub (IC6602)
7	IC6 (IC6951)
8	Not used
9	HDMI2(IC6881)
A	7-3VIDEO SW (IC8002)
B	6-2RGB SW (IC8005)
C	Front end 1 (U7501)
D	Not used
E	TX-COM (2C8904)
F	PANEL LINK TX (IC7401)
G	PANEL LINK RX
H	Not used
I	Not used
K	AV-EEP ROM

GAJ: Returning drive-related adjustment values of the PDP

Order	Data	Size
1	Currently used ABL table	3 bytes
2	Upper limit of the electric power	3 bytes
3	Vsus adjustment value	3 bytes
4	Vofs adjustment value	3 bytes
5	X-SUS-U1 adjustment value (XU1)	3 bytes
6	X-SUS-U2 adjustment value (XU2)	3 bytes
7	X-SUS-D2 adjustment value (XD2)	3 bytes
8	X-SUS-D1 adjustment value (XD1)	3 bytes
9	Y-SUS-U1 adjustment value (YU1)	3 bytes
10	Y-SUS-U2 adjustment value (YU2)	3 bytes
11	Y-SUS-D1-2 adjustment value (YD2)	3 bytes
12	Y-SUS-D1-1 adjustment value (YD1)	3 bytes
13	Y-SUS-D2-2 adjustment value (YD4)	3 bytes
14	Y-SUS-D2-1 adjustment value (YD3)	3 bytes

Data	Table
AB1	ABL table for NTSC
AB2	ABL table for PAL
AB3	ABL table for PC

GPW: Returning RGB-level-related adjustment values of the PDP

Order	Data	Size
1	Panel W/B table currently used	3 bytes
2	Main contrast	4 bytes
3	Red contrast of the W/B adjustment value	4 bytes
4	Green contrast of the W/B adjustment value	4 bytes
5	Blue contrast of the W/B adjustment value	4 bytes
6	Main brightness	4 bytes
7	Red brightness of the W/B adjustment value	4 bytes
8	Green brightness of the W/B adjustment value	4 bytes
9	Blue brightness of the W/B adjustment value	4 bytes

Data	Table
PT1	ABL table for NTSC
PT2	ABL table for PAL
PT3	Reserved table

GS6: Returning information of the Flash Device

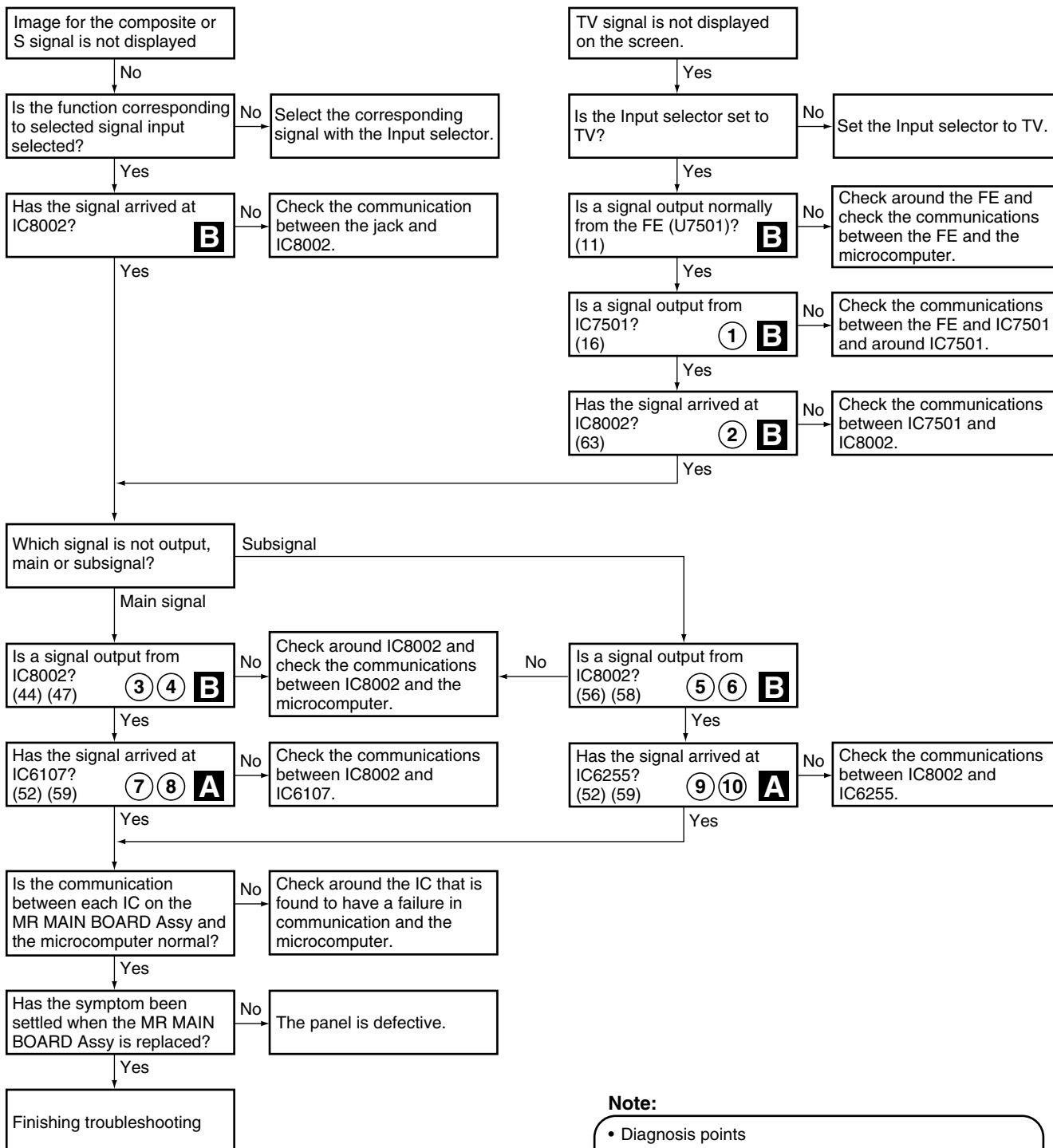
Order	Data	Size
1	Display Information	3 bytes
2	Version of the DTB (PDP-R05XE only)	4 bytes
3	Version of the PC Card (Except PDP-R05FE)	8 bytes
4	Version of the Text	60 bytes
5	User Password	4 bytes

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 TROUBLESHOOTING

● Image for the composite or S signal is not displayed



Note:

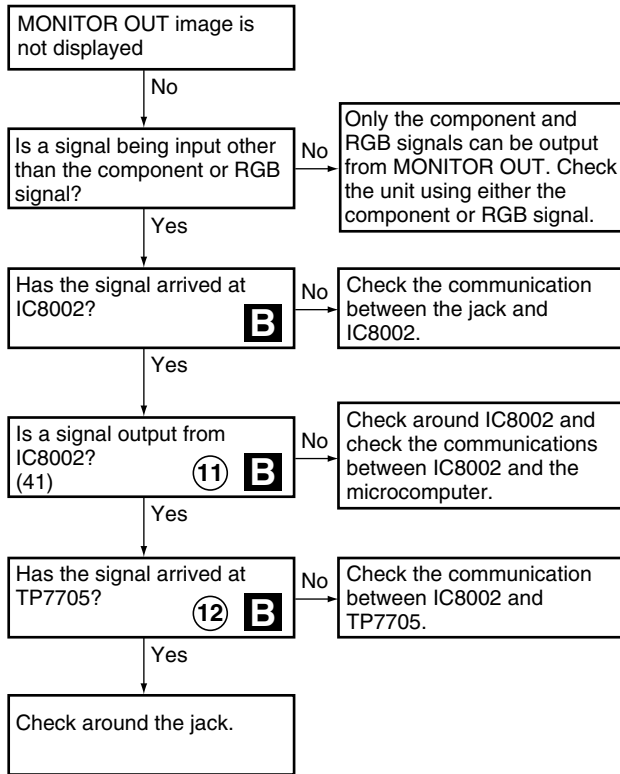
- Diagnosis points

A MR MAIN BOARD ASSY

B AV BOARD ASSY

- For check the communication with the microcomputer, refer to the section 6.7 SERVICE FACTORY MODE.
- The encircled numbers denote measuring point in the Waveforms for Troubleshooting.

● MONITOR OUT image is not displayed



● Image for the component or RGB signals is not displayed

A

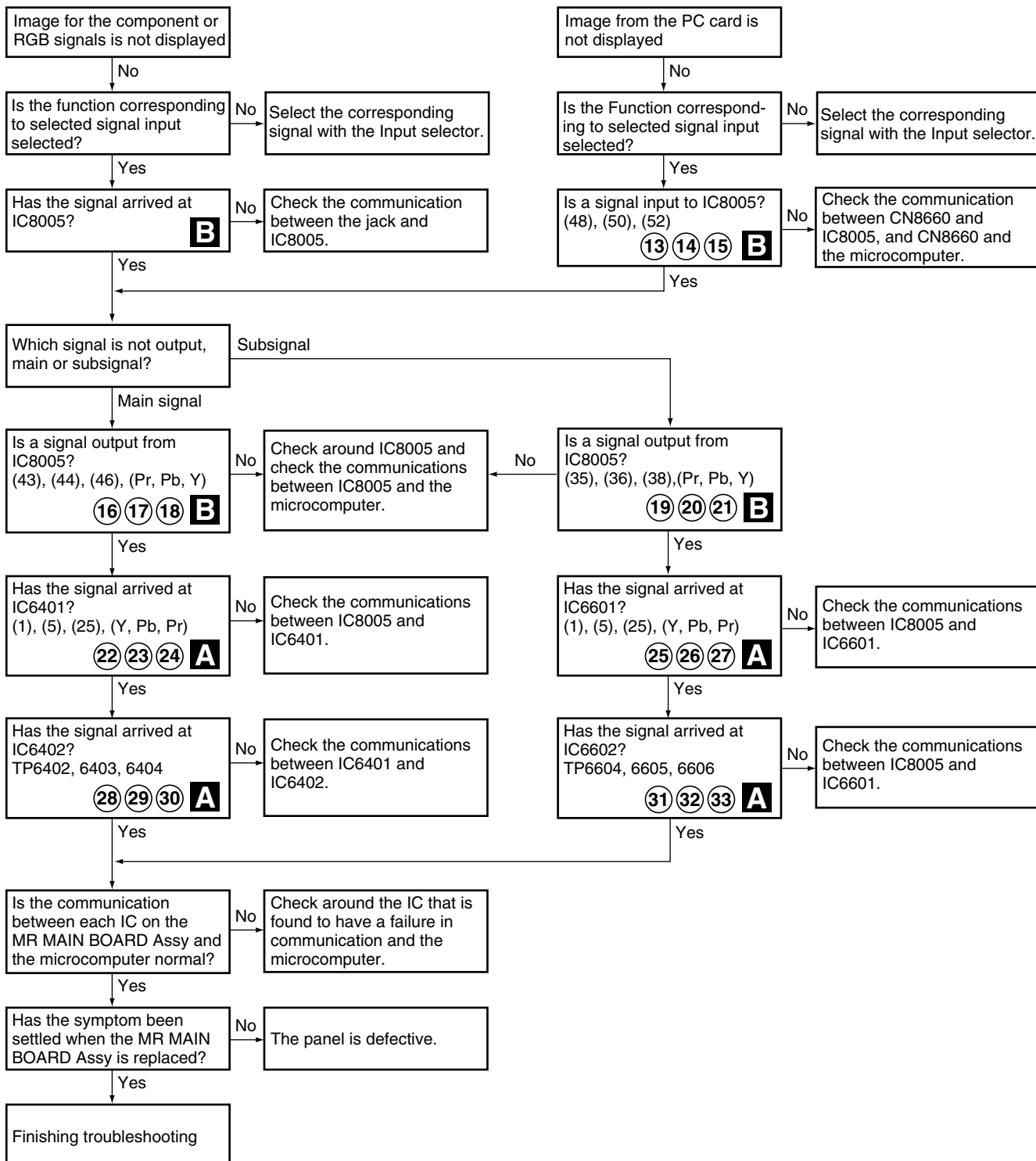
B

C

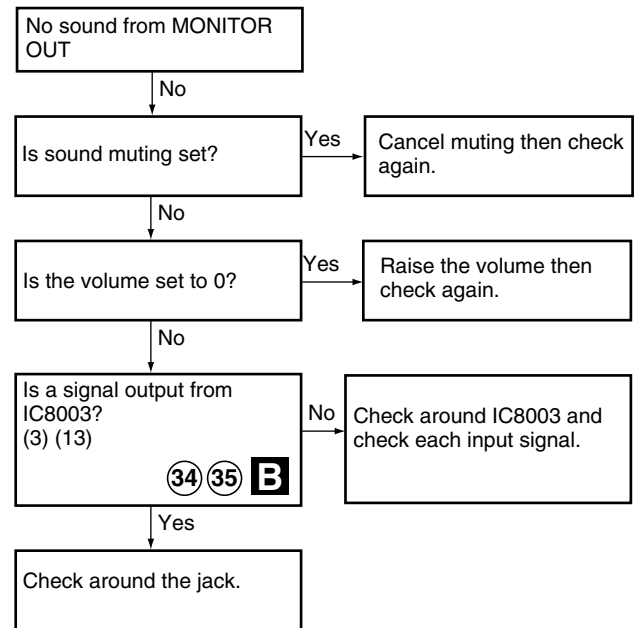
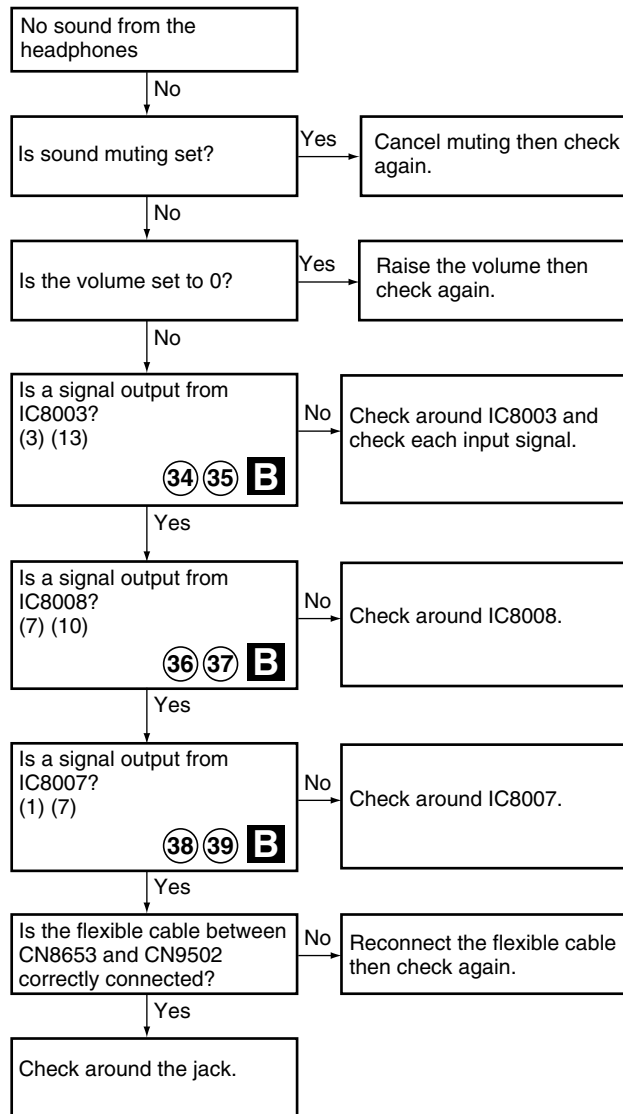
D

E

F



● No sound from the headphones



● No sound from the speakers (1/2)

A

No sound from the speakers

No

Is sound muting set?

Yes

Cancel muting then check again.

No

Is the volume set to 0?

Yes

Raise the volume then check again.

No

B

Are the headphones connected?

No

Disconnect the headphones then check again.

Yes

Is it the only TV sound that doesn't come out?

No

Is it only the VIDEO 3 sound that doesn't come out?

No

Yes

Is a signal output normally from the FE? (11) **B**

No

Check the communications around the FE and between the FE and the microcomputer.

Yes

Is a signal input to IC8003? (4), (11) **B**

No

Check the communications between the jack and IC8003.

C

Is a signal output from IC7501? (12) (40) **B**

No

Check the communications between the FE and IC7501 and around IC7501.

Yes

Check around IC8003 and check the communications between IC8003 and the microcomputer.

Is a signal output from IC7502? (26), (27) (41) (42) **B**

No

Check around IC7502.

Yes

Is it sound other than the TV or VIDEO 3 that doesn't come out?

No

→ (A)

D

Is a signal input to IC8002? (62), (64) (43) (44) **B**

No

Check the communications between IC7502 and IC8002.

Yes

Is a signal input to IC8002? **B**

No

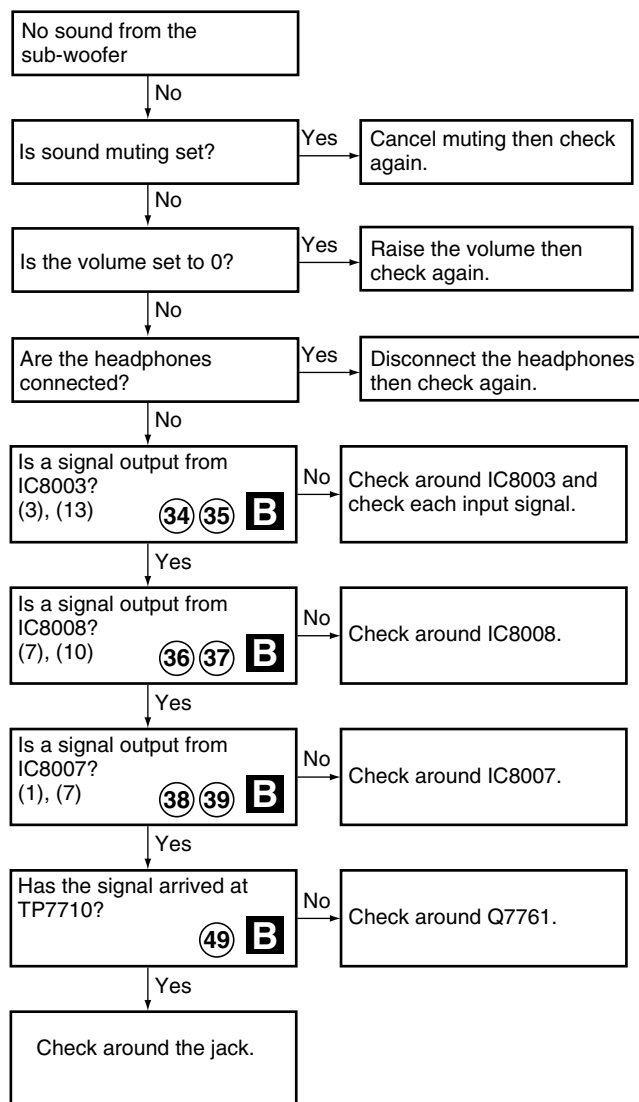
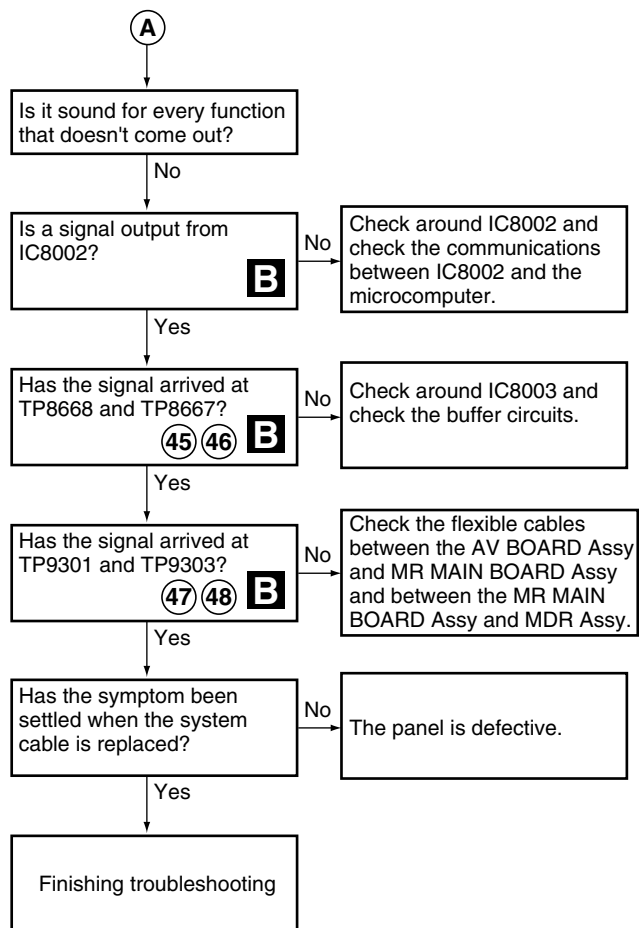
Check the communications between the jack and IC8002.

E

Check around IC8002 and check the communications between IC8002 and the microcomputer.

F

● No sound from the speakers (2/2)



● DTB (Digital Terrestrial Board)(1/2)

A

DTB (Digital Terrestrial Board) does not work

Yes

Is the power supply voltage of CN6001 and CN6002 normal?

I

No

Check the communication between CN6001 and CN8509, between CN6002 and CN8508.

OK

Replace DTB.

Yes

Is DTB_RESET(CN6003 4PIN) becoming High in power on after V+3V_DD stood up?

I

No

Check the communication between CN6003(4) and CN6951(47), between CN6951(47) and IC7202(155).

OK

Replace DTB.

Yes

Are TXDA(11) and RXDA(12) of CN6003 communicating?

I

No

Check the communication between CN6003(11, 12) and CN6951(39, 40).

OK

Replace DTB.

Yes

Is the panel displaying an animation?

No

Is a signal input into IC6951(171-202)?

B

No

Check the communication between CN6003 and CN6951, between CN6951 and IC6951.

OK

Replace DTB.

Yes

C

Yes

Has the symptom been settled when the MR MAIN BOARD Assy is replaced?

No

The panel is defective.

Yes

Finishing troubleshooting

D

Is an animation output by Monitor OUT?

No

Is a signal output from RGB, CVBS and Y/C of CN4000?.

I

No

DTB is defective. Replace DTB.

Yes

Yes

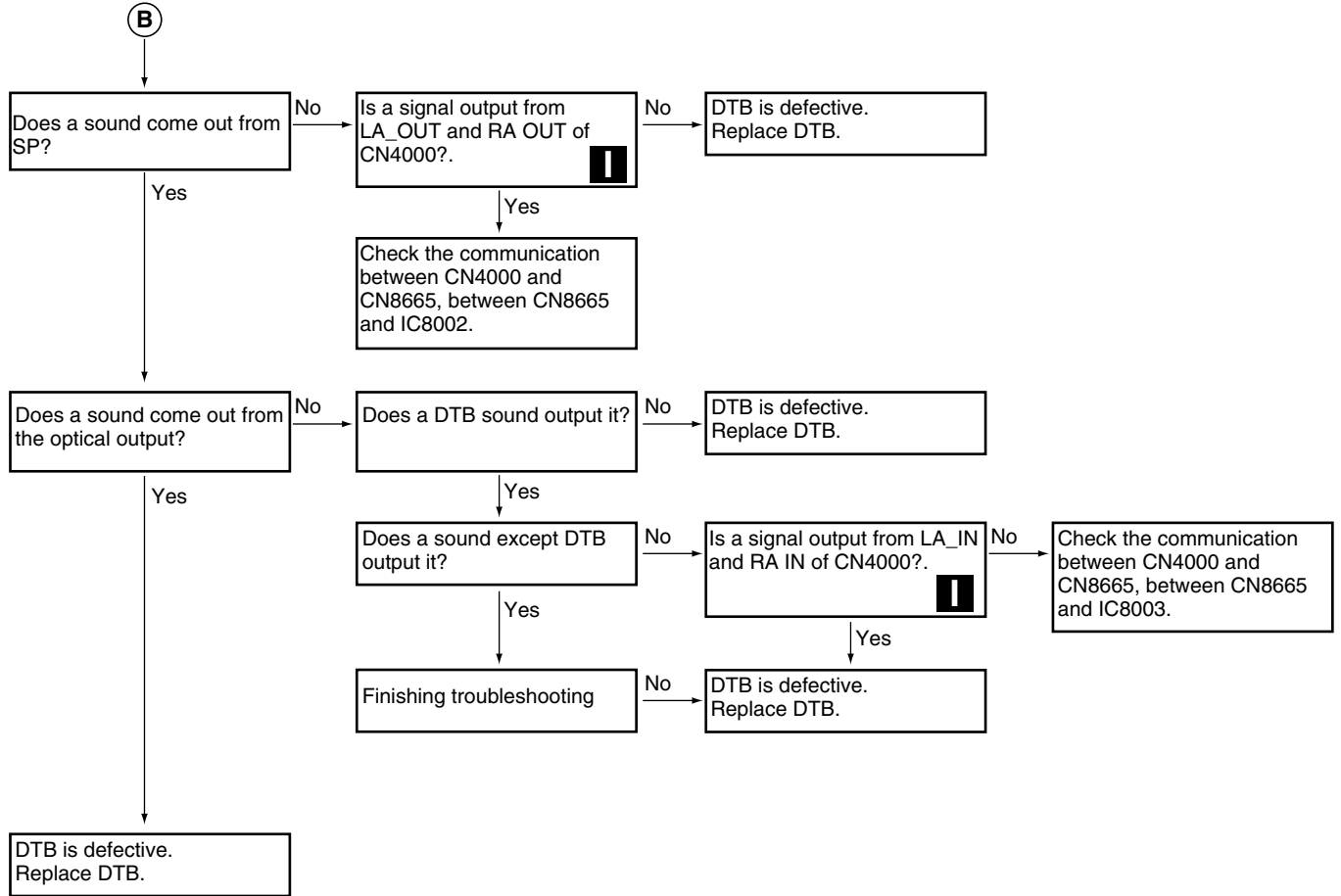
Check the communication between CN4000 and CN8665, between CN8665 and IC8002, between CN8665 and IC8005.

B

E

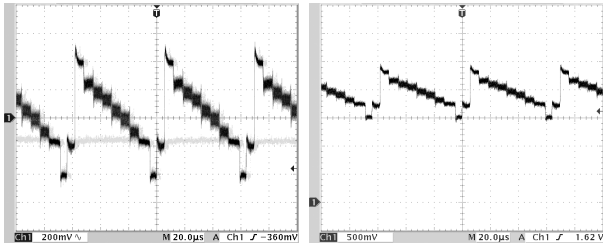
F

● DTB (Digital Terrestrial Board)(2/2)

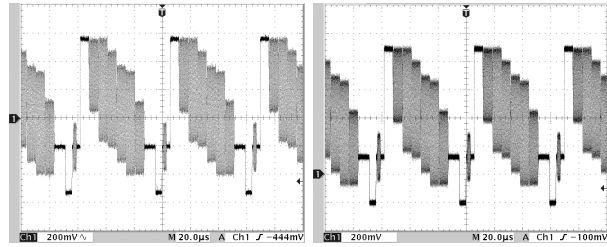


A

① IC7501 - pin 16

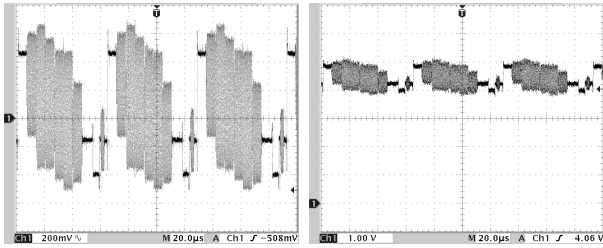


⑦ IC6107 - pin 52

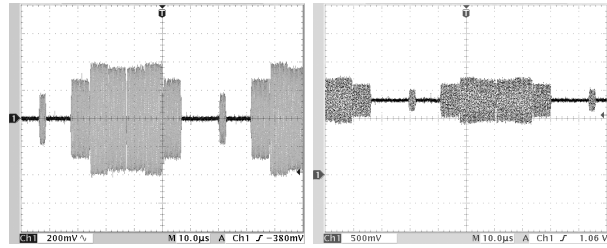


B

② IC8002 - pin 63

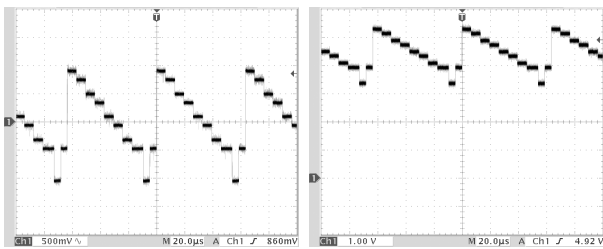


⑧ IC6107 - pin 59

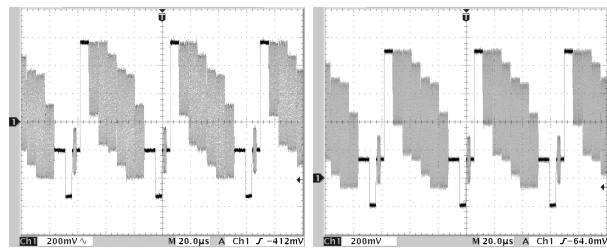


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③ IC8002 - pin 44

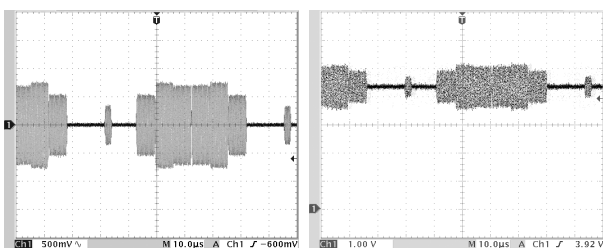


⑨ IC6255 - pin 52

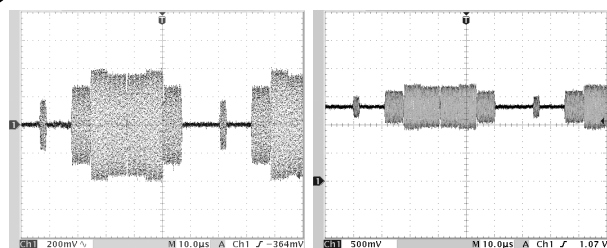


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④ IC8002 - pin 47

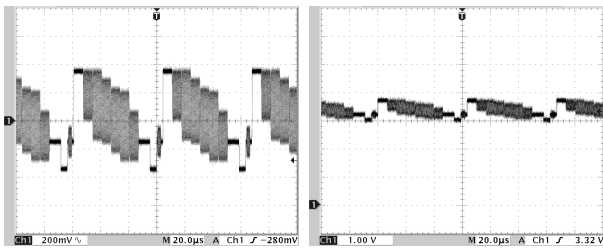


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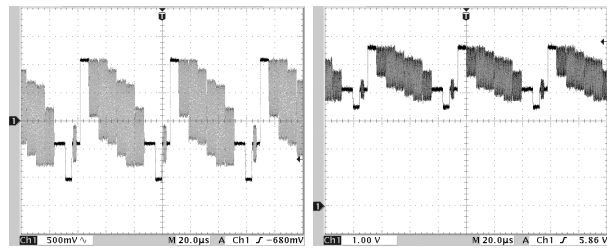


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⑤ IC8002 - pin 56

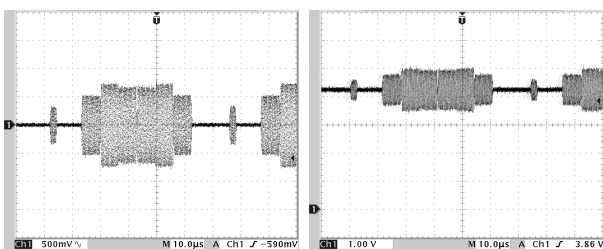


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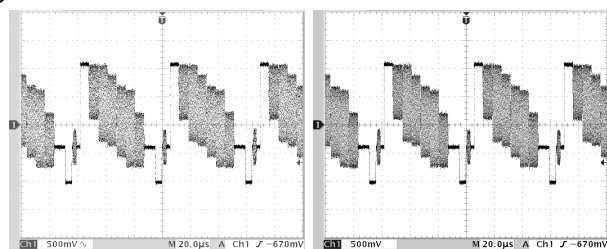


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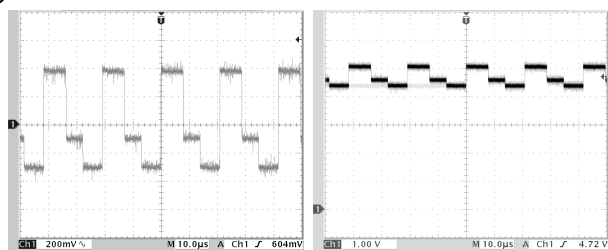
⑥ IC8002 - pin 58



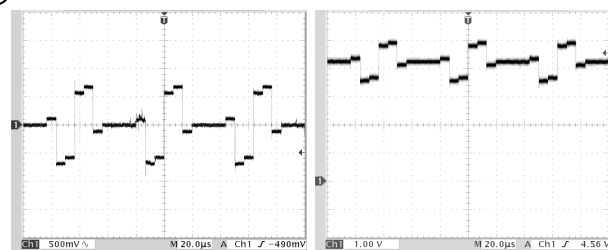
⑫ TP7705



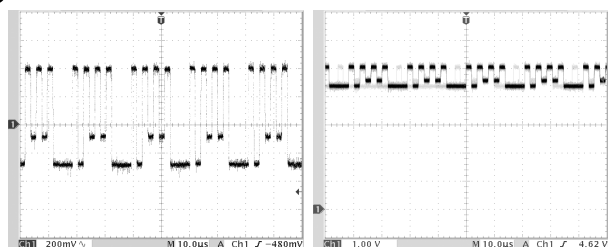
13 IC8005 - pin 48



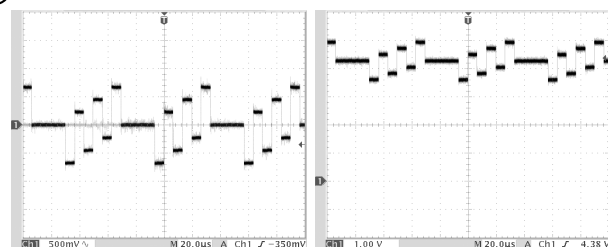
19 IC8005 - pin 35



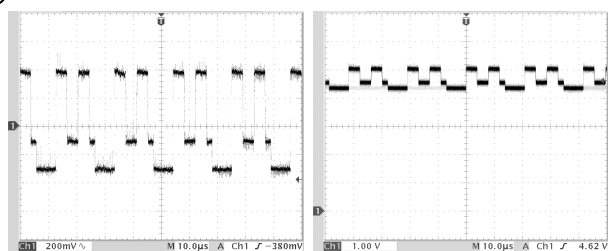
14 IC8005 - pin 50



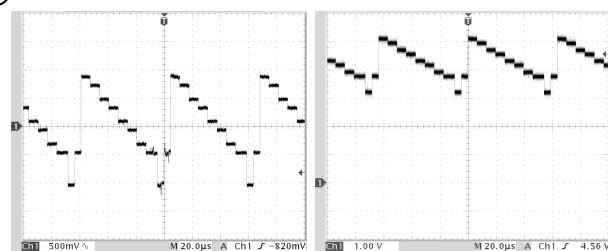
20 IC8005 - pin 36



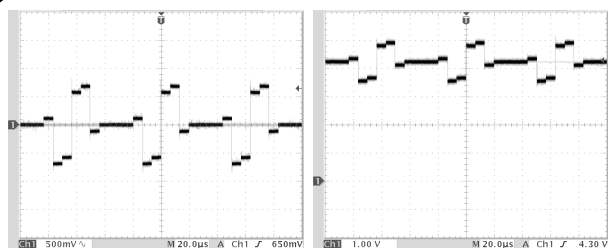
15 IC8005 - pin 52



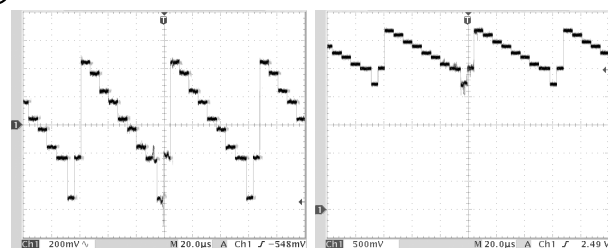
21 IC8005 - pin 38



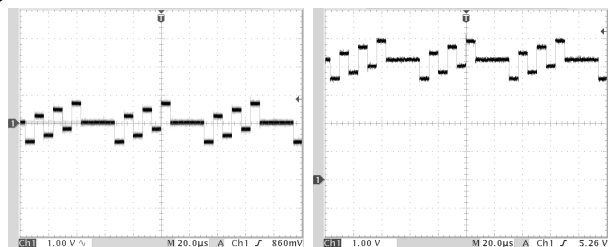
16 IC8005 - pin 43



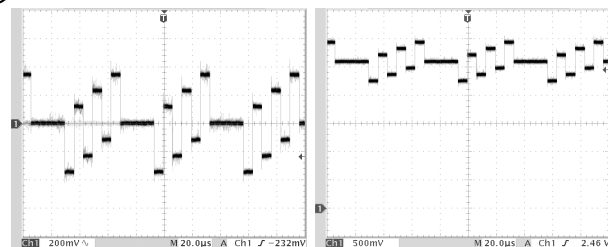
22 IC6401 - pin 1



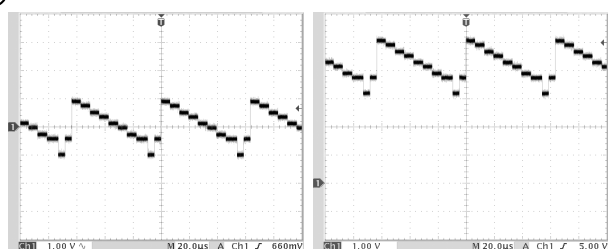
17 IC8005 - pin 44



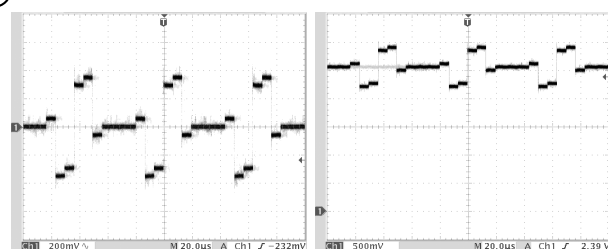
23 IC6401 - pin 5



18 IC8005 - pin 46

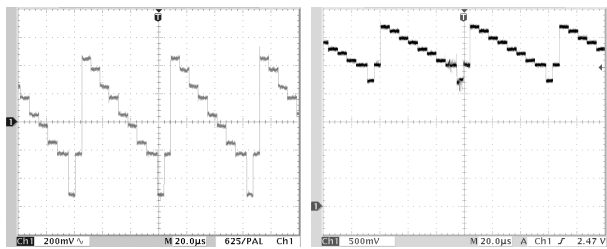


24 IC6401 - pin 25

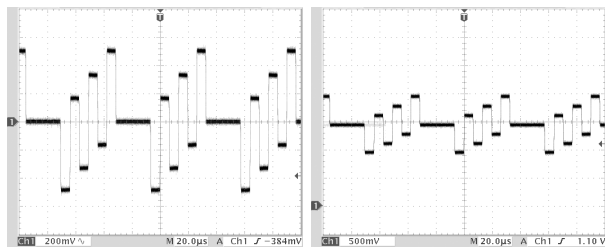


A

②5 IC6601 - pin 1

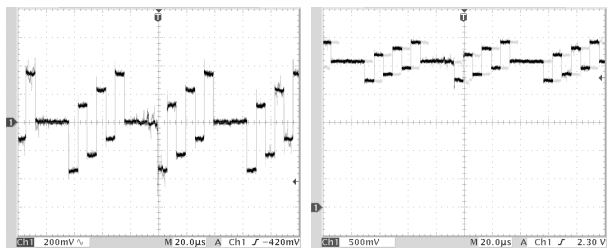


③1 TP6604

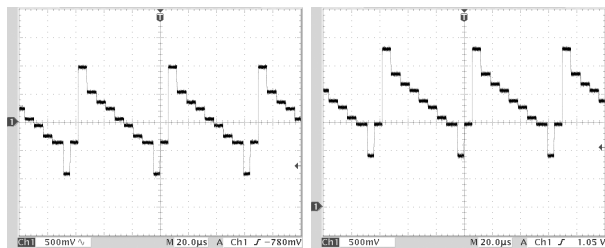


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②6 IC6601 - pin 5

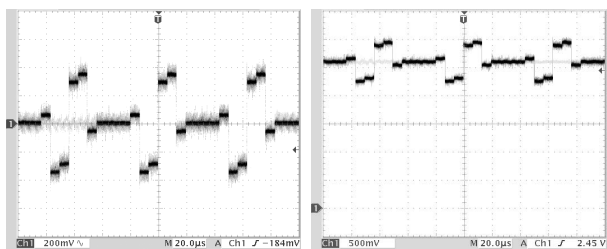


③2 TP6605

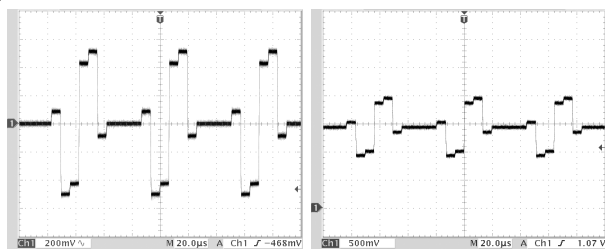


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②7 IC6601 - pin 25

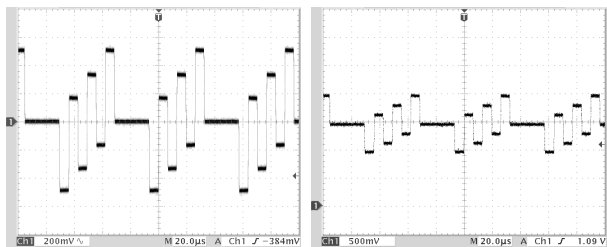


③3 TP6606

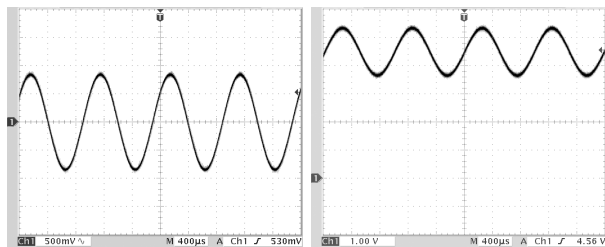


D

②8 TP6402

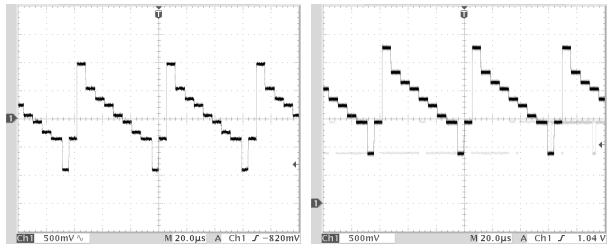


③4 IC8003 - pin 3

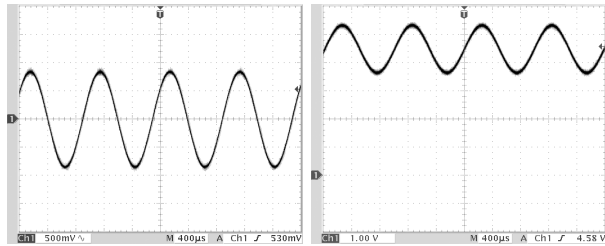


E

②9 TP6403

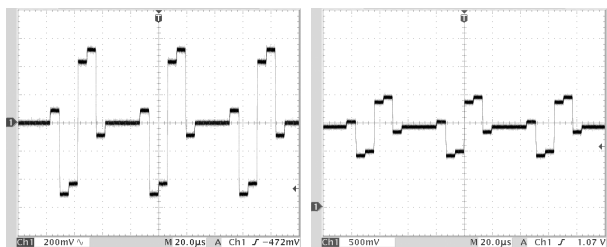


③5 IC8003 - pin 13

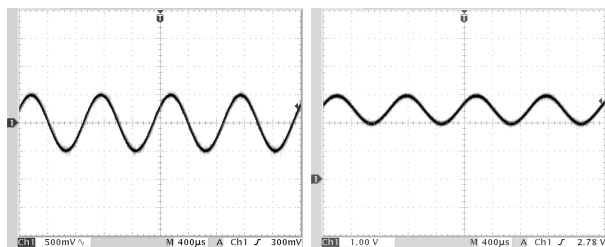


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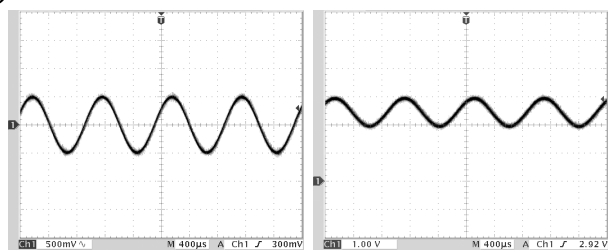
③0 TP6404



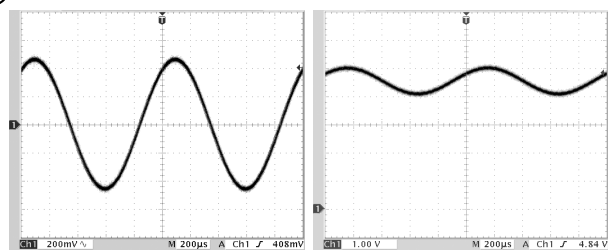
③6 IC8006 - pin 7



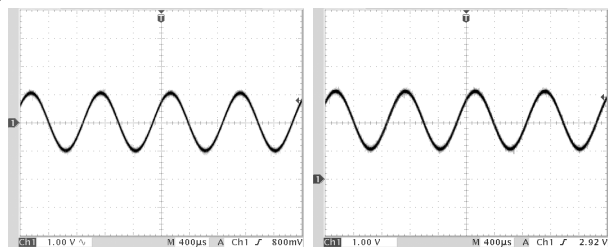
37 IC8006 - pin 10



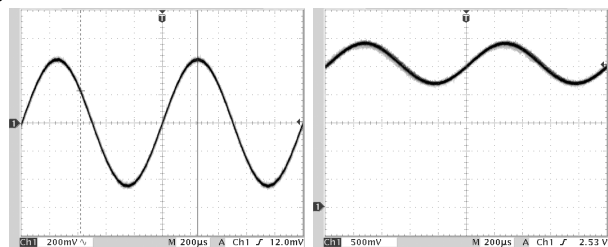
43 IC8002 - pin 62



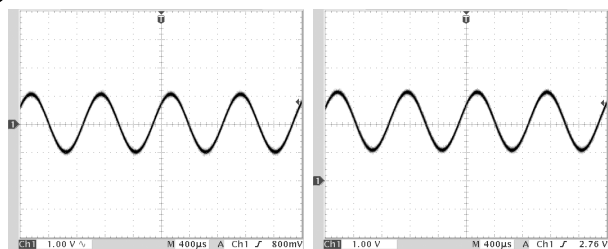
38 IC8007 - pin 1



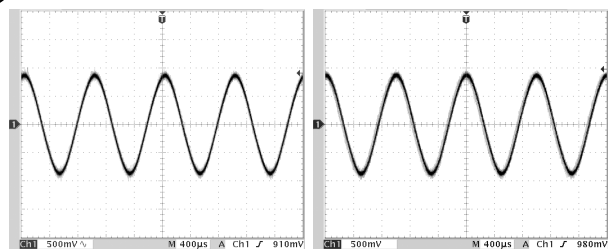
44 IC8002 - pin 64



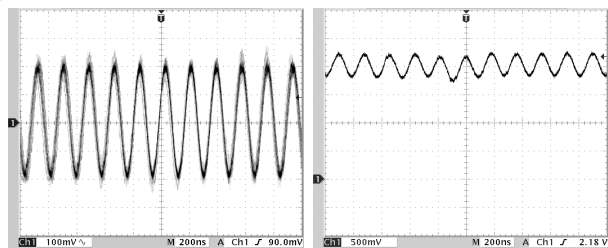
39 IC8007 - pin 7



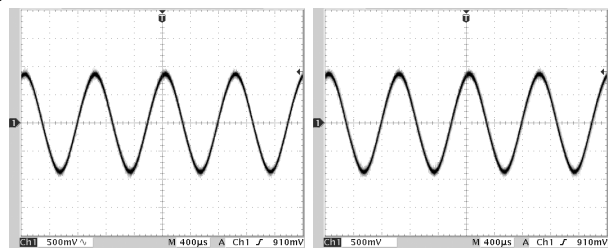
45 TP8667



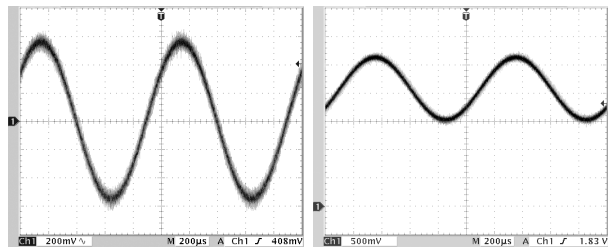
40 IC7501 - pin 12



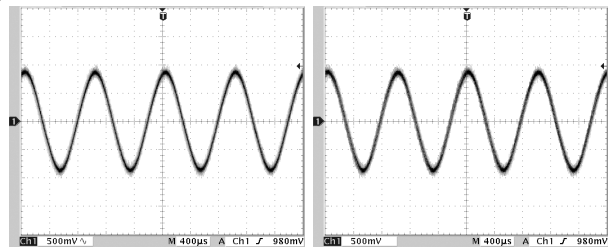
46 TP8668



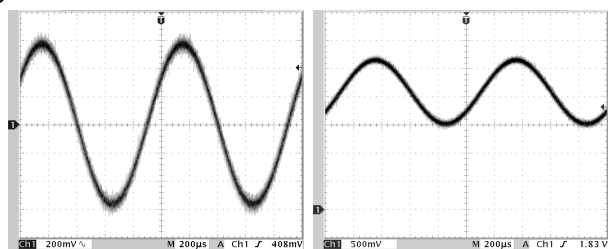
41 IC7502 - pin 26



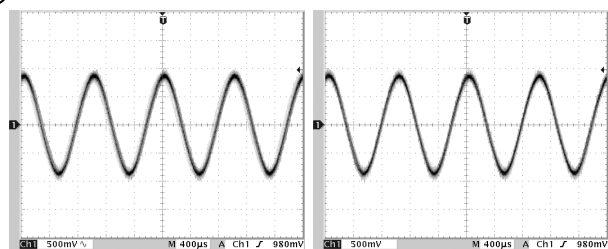
47 TP9301



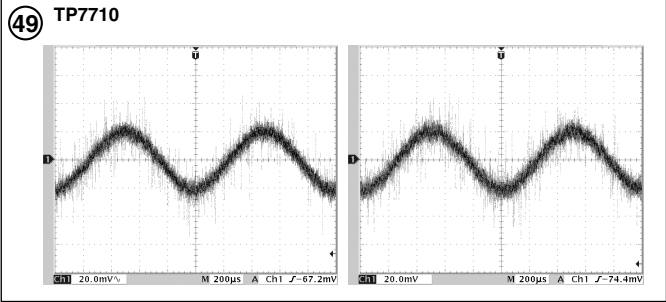
42 IC7502 - pin 27



48 TP9303



A



B

C

D

E

F

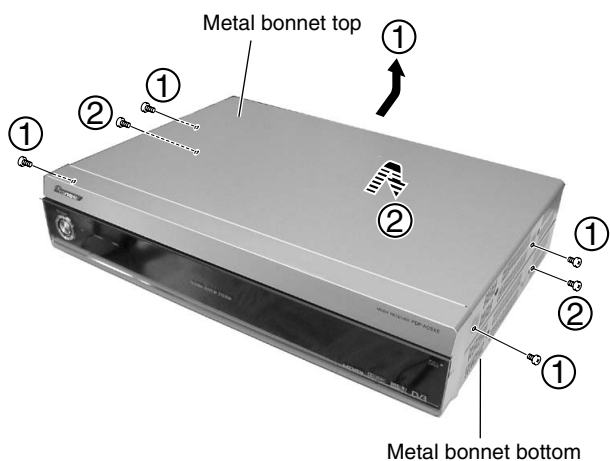
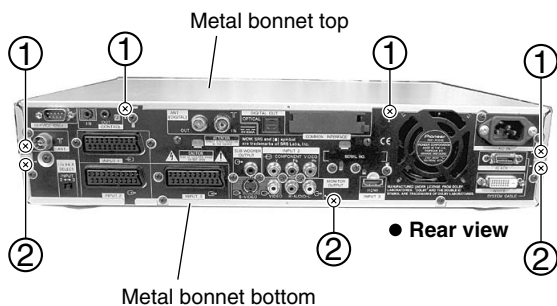
Note: Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

1 Metal bonnet top and metal bonnet bottom

- ① Remove the metal bonnet top by removing the eight screws.
- ② Remove the metal bonnet bottom by removing the five screws.

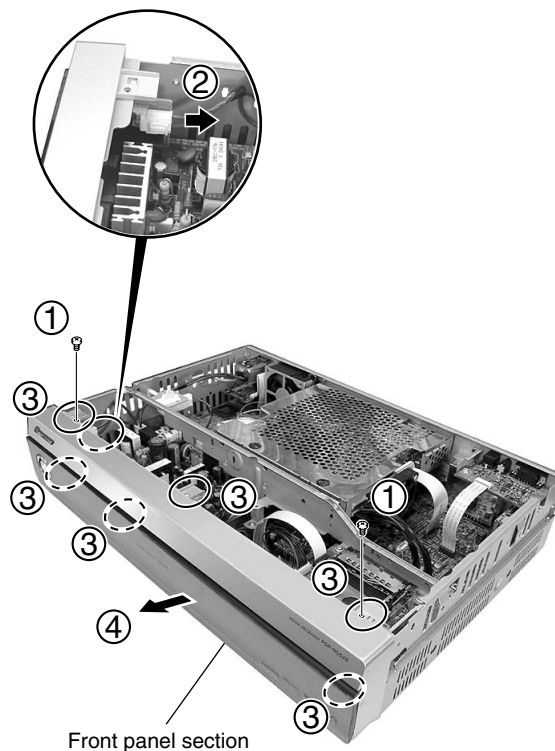
Caution :

Please remove it after pulling it in a rear direction because bonnet top and metal bonnet bottom are hard to reduce.



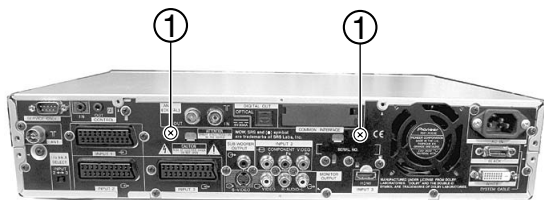
2 Front panel section

- ① Remove the two screws.
- ② Disconnect the one connector.
- ③ Unhook the six hooks.
- ④ Remove the front panel section.



3 TUNER BOARD Assy

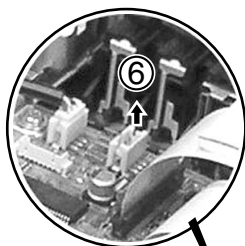
- ① Remove the two screws.



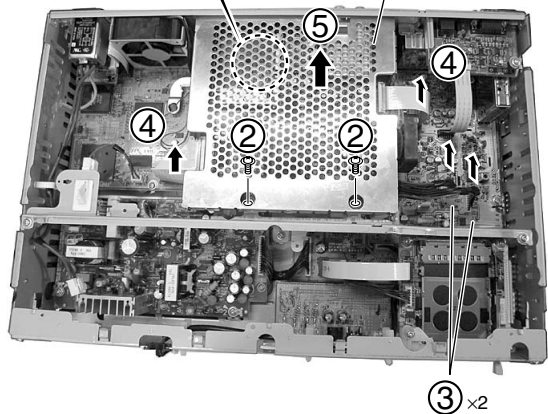
● Rear view



- ② Remove the two screws.
 ③ Disconnect the two connectors.
 ④ Disconnect the two flexible cables.
 ⑤ Remove the TUNER BOARD Assy.
 ⑥ Disconnect the one connector.



1
TUNER BOARD Assy



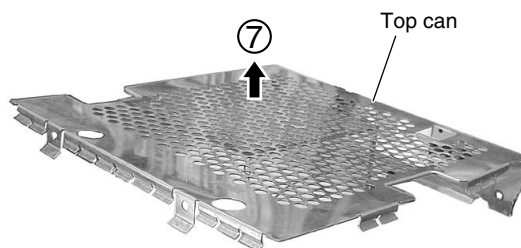
③ ×2



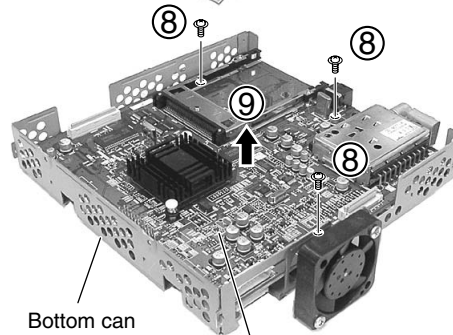
- ⑦ Remove the top can.

- ⑧ Remove the three screws.

- ⑨ Remove the PC board TUNER.



Top can

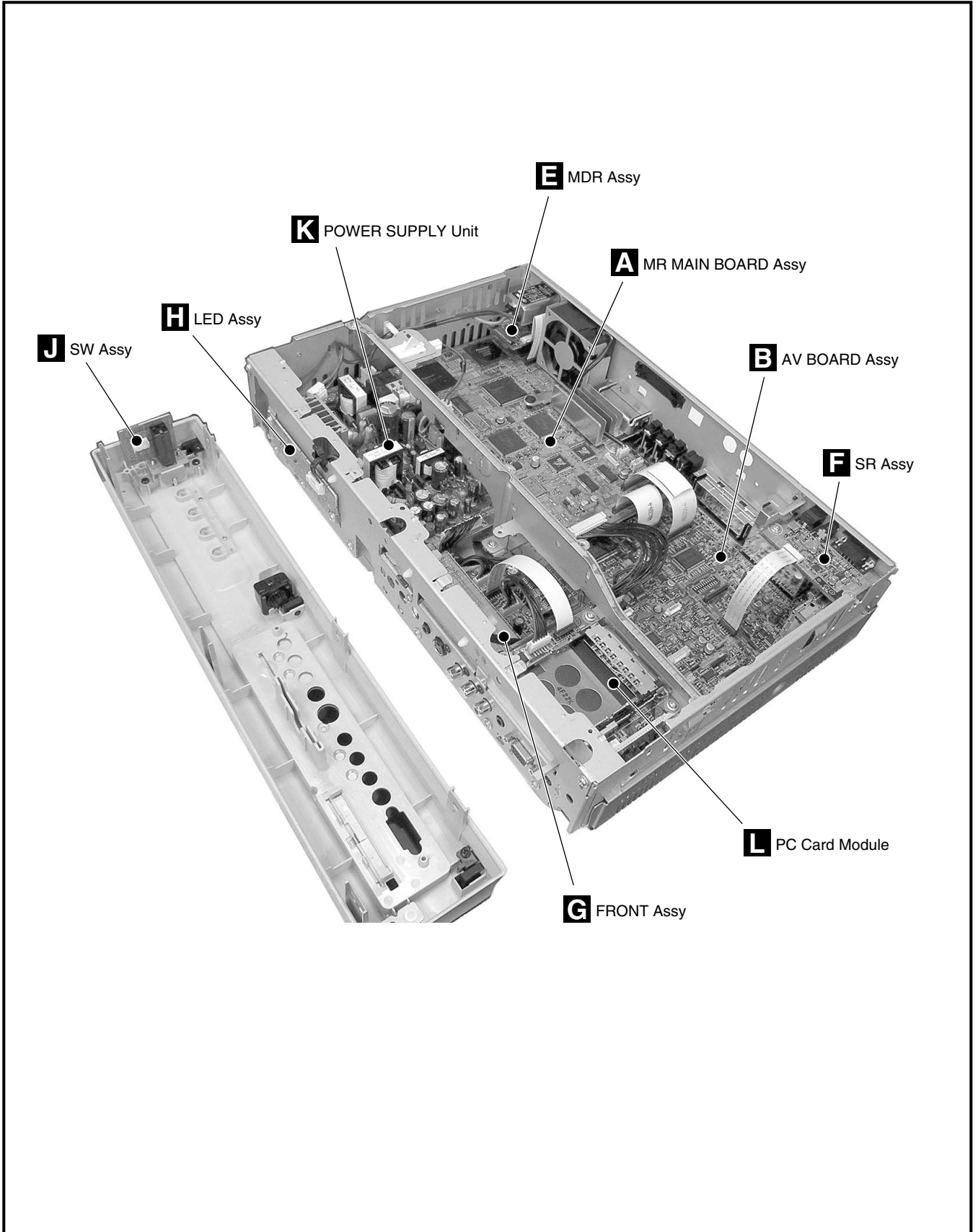


Bottom can

PC board TUNER



PCB Location

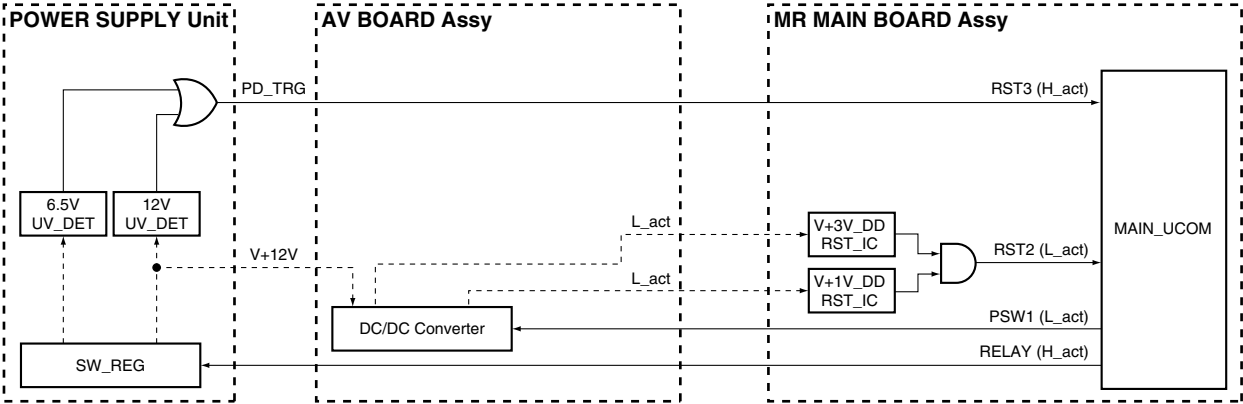


7.2 EXPLANATION

7.2.1 PROCESSING IN ABNORMALITY

Power supply and DC-DC converter

Circuit diagram

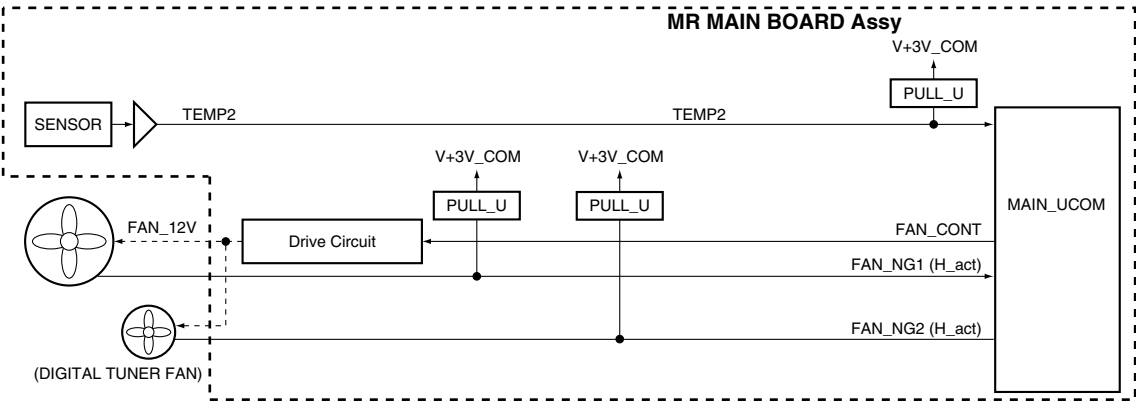


Specifications for port monitoring

Port Name	SD/PD Indication	Assigned Pin	Active
PD_MAIN (PD_TRG)	MR_PWR	41	Power-down with H
RST2	ASIC power supply	98	Shutdown with L

Fan and temperature sensor

Circuit diagram

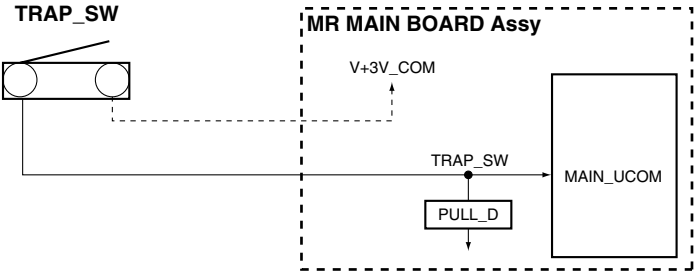


Specifications for port monitoring

Port Name	SD/PD Indication	Assigned Pin	Active
FAN_NG 1	FAN	31	Shutdown with H
FAN_NG 2	FAN	32	Shutdown with H
TEMP2	Abnormally high temperature in the MR	50	Shutdown when the value exceeds the predetermined value

TRAP_SW



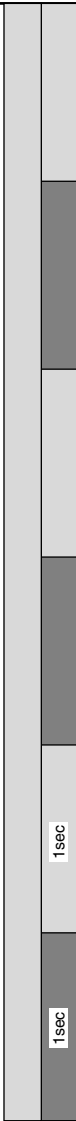


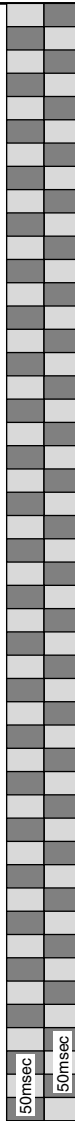
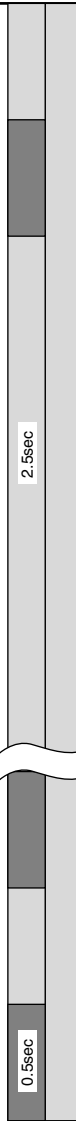


● Circuit diagram



● Specifications for port monitoring

Port Name	SD/PD Indication	Assigned Pin	Active
TRAP_SW	Modification tried	30	OFF with L

LED-lighting patterns

Status of the Unit		LED-lighting Pattern			
Standby, power management	Lit in red				
		G	R		
Power on	Lit in green				
		G	R		
PDP's power not on	Flashing in red (at 1-sec intervals)				
		G	R		
System cable disconnected *	Flashing alternately in red and green (at 1-sec intervals)				
		G	R		
Waiting for start of rewriting by the microcomputer					
		G	R		
Waiting for finish of rewriting by the microcomputer					
		G	R		
Shutdown (circuit protection)	Flashing in green n times (initially at 0.5-sec intervals then 2.5-sec intervals)				
		G	R		
Power-down (circuit protection)	Flashing in red for n times (initially at 0.5-sec intervals then 2.5-sec intervals)				
		G	R		
TRAP switch operation					
		G	R		

* In this case, the red and green areas on the screen of the panel flash alternately.

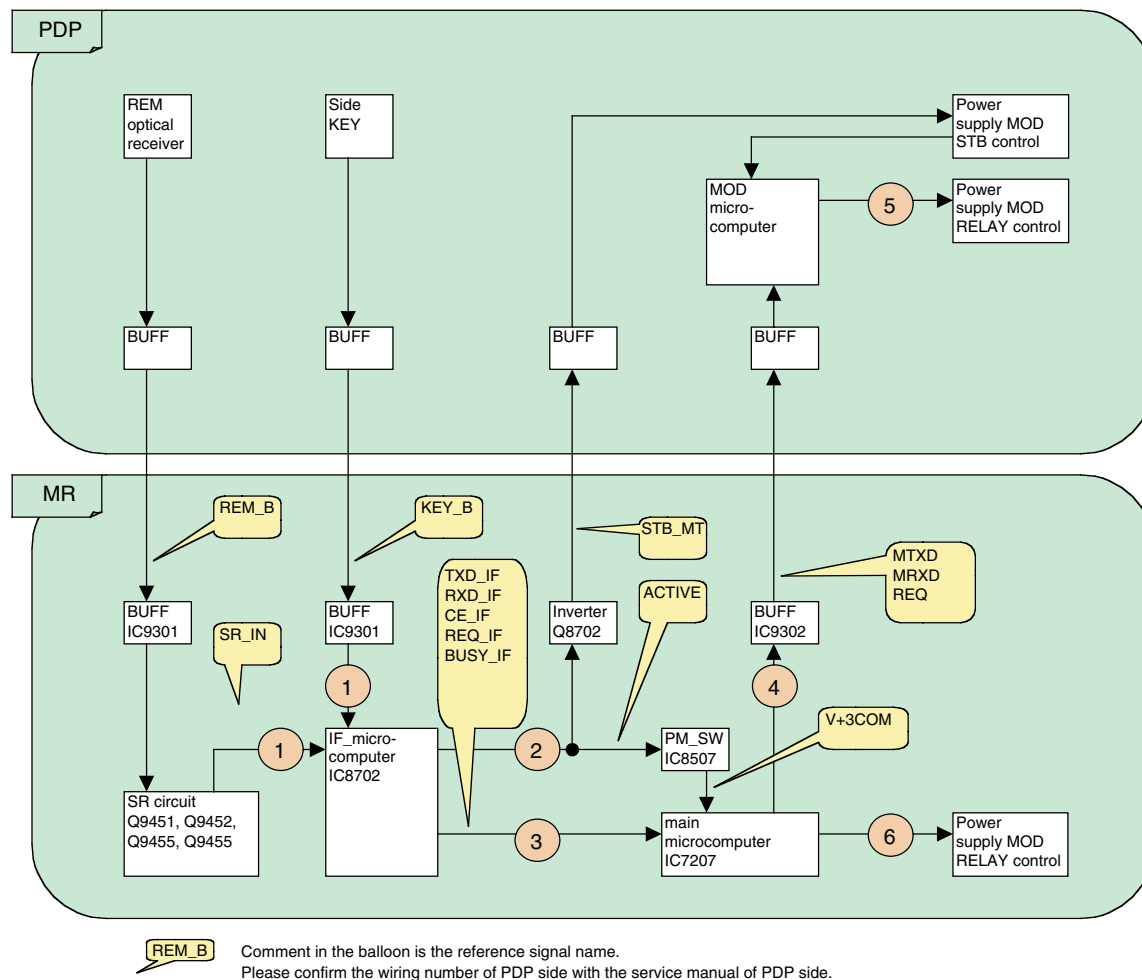
■ Defective points assumed from the number of times of LED flashing

No. of times of LED flashing LEDs on the panel				Category *1	Site detected as defective	Possible defective points (representative examples)		OSD when detected (warning message)
RED	GRN	RED	GRN					
	Green 1	Red			Panel drive IC	*2		None
	Green 2	Red			Module section IIC	*2		None
	Green 3	Red			Power decrease of DIGITAL-DC-DC	*2		None
	Green 4	Red			Panel having abnormally high temperature	*2		The power is shut down, because the internal temperature has risen. Check the temperature surrounding the PDP. (SD04)
	Green 5	Red			Short-circuiting of the speakers	*2		The power is shut down, because the protection circuit inside the unit is activated. Check if the speaker cables are short-circuited. (SD05)
Red			Green 6	SD	Module microcomputer	Disconnection of the system cable Defective module microcomputer or its peripheral circuits of the panel (Refer to the service manual of the PDP-434PU or PDP-504PU.) Defective main microcomputer (IC7207) Failure in communication (TXD_MD, RXD_MD, REQ_MD) between the panel's module microcomputer and IC7207 (main microcomputer)		None
Red			Green 7		3-wire serial connection of the main section	Defective IC7004 or its peripheral circuits Failure in communication (TXD_IC, XD_IC2, CLK_IC2, IC2_CE, IC2_EMG) between IC7004 and IC7207 (main microcomputer) Defective IC7101 or its peripheral circuits Failure in communication (TXD_IC3, RXD_IC3, CLK_IC3, IC3_CE, IC3_REQ, IC3_BUSY) between IC7101 and IC7207 (main microcomputer)		None
Red			Green 8		IIC of the main section	Defective IC6107 (CD_MAIN) or its peripheral circuits Defective IC6255 (CD_SUB) or its peripheral circuits Defective IC6402 (AD_MAIN) or its peripheral circuits Defective IC6602 (AD_SUB) or its peripheral circuits Defective IC6881 (HDMI_2) or its peripheral circuits Defective IC6951 (BUS_SW) or its peripheral circuits Defective IC7401 (TX) or its peripheral circuits Defective U7501 (TU) or its peripheral circuits Defective U7502 (TU) or its peripheral circuits Defective IC8002 (AV_SW) or its peripheral circuits Defective IC8005 (RGB_SW) or its peripheral circuits Defective IC7205 (E2P) or its peripheral circuits Failure in communication (SCL_AV, SDA_AV, SCL_MAIN, SDA_MAIN, SCL_HDMI, SDA_HDMI, SCL_EP, SDA_EP) between one of the above devices and IC7207 (main microcomputer)		None
Red			Green 9		Main microcomputer	Defective IC7207 (main microcomputer) Defective flexible cable for communication between the MR MAIN BOARD Assy and the AV BOARD Assy Failure in communication (TXD_IF, RXD_IF, CLK_IF, IF_CE, IF_BUSY) between IC7207 (main microcomputer) and IC8702		None
Red			Green 10		Fan	Failure in the fan motor, or the fan stopped because of dust attached to the fan		None
Red			Green 11		MR or unit having abnormally high temperature	The Media Receiver or the unit being used at high temperature		The power is shut down, because the internal temperature has risen. Check the temperature surrounding the Media Receiver. (SD11)
Red			Green 12		Digital tuner (U.S. model)	Defective DTV tuner Failure in communication (TXD_DT, RXD_DT) between the digital tuner and IC8202 (main microcomputer)		None
Red			Green 13		ASIC power supply (DC-DC)	Defective U8502 (DD_CON) or short-circuiting elsewhere		None
Red			Green 14		IF E2P	Defective IC8705 (IF_E2P) or its peripheral circuits		None
Red	Red 1			PD	MR PWR	Defective Power Supply Assy of the Media Receiver, or power short-circuiting in another Assy		None
Red 2	Red				POWER	*2		None
Red 3	Red				SCAN	*2		None
Red 4	Red				SCN-5V	*2		None
Red 5	Red				Y-DRIVE	*2		None
Red 6	Red				Y-DCDC	*2		None
Red 7	Red				Y-SUS	*2		None
Red 8	Red				ADRS	*2		None
Red 9	Red				X-DRIVE	*2		None
Red 10	Red				X-DCDC	*2		None
Red 11	Red				X-SUS	*2		None
Red 12	Red				D-DCDC	*2		None
Red 13	Red				IC4	*2		None

*1: Shutdown (SD) is a protective operation controlled by the microcomputer, and you can turn on the unit again using the remote control unit. Power-down (PD) is a protective operation activated by the circuitry and can be reset after AC power is off for about 1 minute.
*2: Refer to the service manual of the PDP-435PE or PDP-505PE.

7.2.2 SEQUENCE

R05 series Power-on sequence



- ① : Remote controller signal (or, KEY signal) is input into IF microcomputer.
- ② : IF microcomputer supplies the power supply to Main microcomputer and MOD microcomputer.
- ③ : IF microcomputer communicates the operation information of Remote controller (or KEY) to Main microcomputer.
- ④ : Main microcomputer sends the activation order to MOD microcomputer.
- ⑤ : MOD microcomputer controls the relay of PDP power supply MOD, and activate the power supply of PDP side.
- ⑥ : Main microcomputer controls the relay of MR power supply MOD, and activate the power supply of MR side.

7.3 PARTS

7.3.1 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

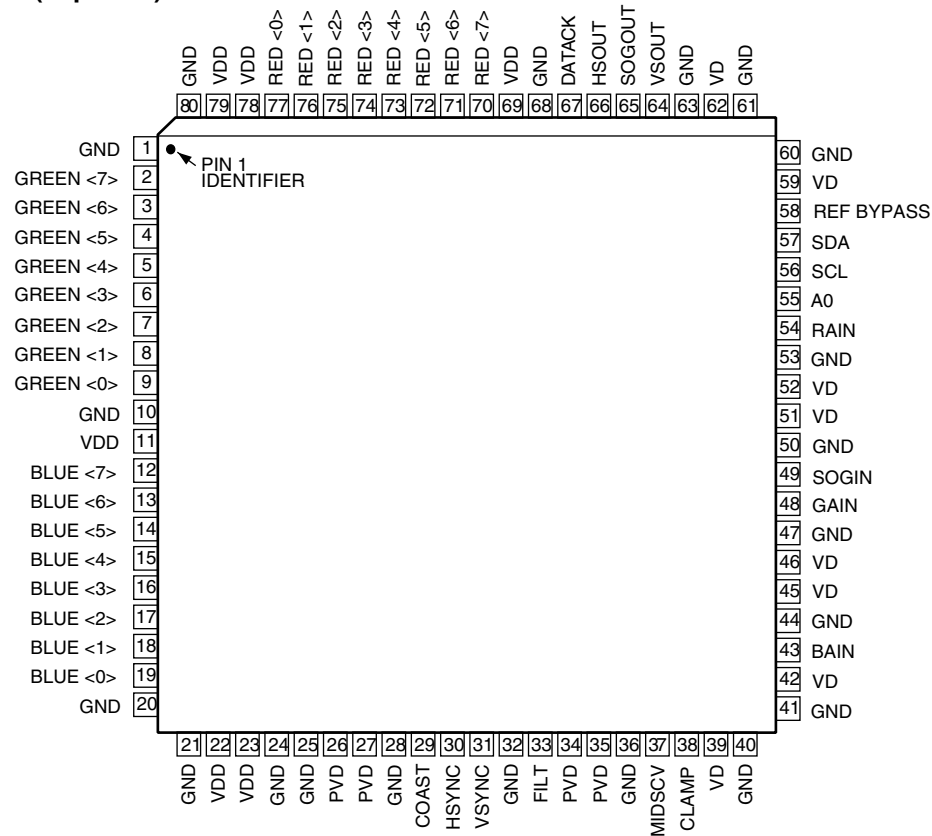
• List of IC

AD80058-K, SM5301BS, BA7078AF, SII9993CTG100, HY57V643220CT-7 (or K4S643232H-TC60-K), MBM29PL3200BE70PFV, SII170BCLG64, CXA2069Q, MSP3417G, TDA9818TS, SDA6000

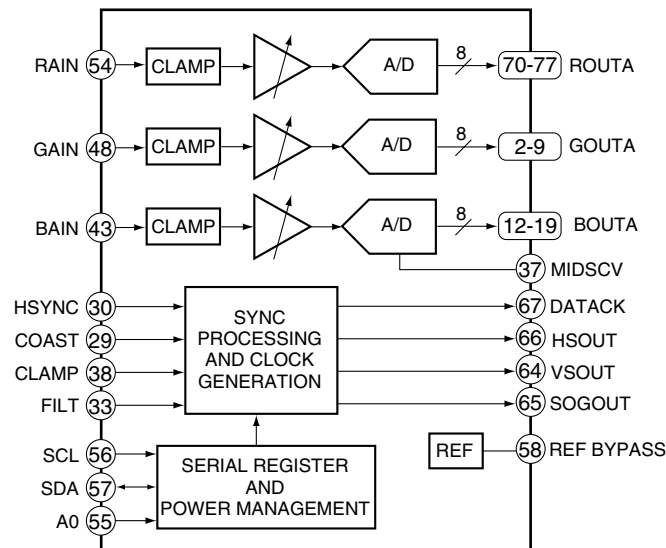
■ AD80058-K (MR MAIN BOARD ASSY : IC6402, IC6602)

• 110 MSPS Analog Interface

• Pin Arrangement (Top view)



• Block Diagram



● Pin Function

A

B

C

D

E

F

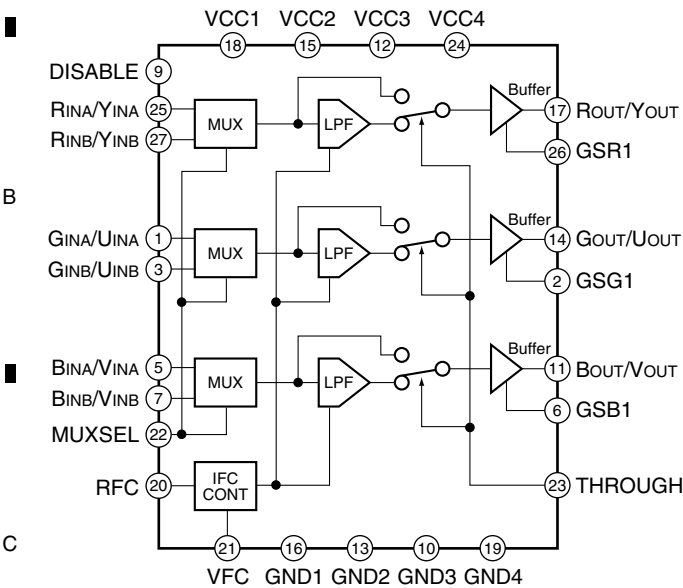
No.	Pin Name	I/O	Pin Function
1	GND	–	Ground
2	GREEN 7	O	Converter Green output (MSB)
3	GREEN 6	O	Converter Green output
4	GREEN 5	O	Converter Green output
5	GREEN 4	O	Converter Green output
6	GREEN 3	O	Converter Green output
7	GREEN 2	O	Converter Green output
8	GREEN 1	O	Converter Green output
9	GREEN 0	O	Converter Green output
10	GND	–	Ground
11	VDD	–	Power supply (3.3V)
12	BLUE 7	O	Converter Blue output (MSB)
13	BLUE 6	O	Converter Blue output
14	BLUE 5	O	Converter Blue output
15	BLUE 4	O	Converter Blue output
16	BLUE 3	O	Converter Blue output
17	BLUE 2	O	Converter Blue output
18	BLUE 1	O	Converter Blue output
19	BLUE 0	O	Converter Blue output
20	GND	–	Ground
21	GND	–	Ground
22	VDD	–	Power supply (3.3V)
23	VDD	–	Power supply (3.3V)
24	GND	–	Ground
25	GND	–	Ground
26	PVD	–	PLL power supply (3.3V)
27	PVD	–	PLL power supply (3.3V)
28	GND	–	Ground
29	COAST	I	PLL COAST signal input
30	HSYNC	I	Horizontal sync. input
31	VSNC	I	Vertical sync. input
32	GND	–	Ground
33	FILT	–	External filter connection pin for built-in PLL
34	PVD	–	PLL power supply (3.3V)
35	PVD	–	PLL power supply (3.3V)
36	GND	–	Ground
37	MIDSCV	–	Internal middle scale voltage bias
38	CLAMP	I	Clamp input (External clamp signal)
39	VD	–	Analog power supply (3.3V)
40	GND	–	Ground
41	GND	–	Ground
42	VD	–	Analog power supply (3.3V)
43	BAIN	I	Analog input for converter B
44	GND	–	Ground
45	VD	–	Analog power supply (3.3V)

No.	Pin Name	I/O	Pin Function
46	VD	–	Analog power supply (3.3V)
47	GND	–	Ground
48	GAIN	I	Analog input for converter G
49	SOGIN	I	Input for Sync-on Green
50	GND	–	Ground
51	VD	–	Analog power supply (3.3V)
52	VD	–	Analog power supply (3.3V)
53	GND	–	Ground
54	RAIN	I	Analog input for converter R
55	A0	I	Address input 1 of serial port
56	SCL	I	Data clock (max. 100kHz) of serial port
57	SDA	I/O	Data input/output of serial port
58	REF BYPASS	–	Internal reference bypass
59	VD	–	Analog power supply (3.3V)
60	GND	–	Ground
61	GND	–	Ground
62	VD	–	Analog power supply (3.3V)
63	GND	–	Ground
64	VSOUT	O	VSYSNC output (phasing with DATACLK)
65	SOGOUT	O	Sync-on-Green slicer output
66	HSOUT	O	HSYSNC output (phasing with DATACLK)
67	DATACLK	O	Data input/output clock
68	GND	–	Ground
69	VDD	–	Power supply (3.3V)
70	RED 7	O	Converter Red output (MSB)
71	RED 6	O	Converter Red output
72	RED 5	O	Converter Red output
73	RED 4	O	Converter Red output
74	RED 3	O	Converter Red output
75	RED 2	O	Converter Red output
76	RED 1	O	Converter Red output
77	RED 0	O	Converter Red output
78	VDD	–	Power supply (3.3V)
79	VDD	–	Power supply (3.3V)
80	GND	–	Ground

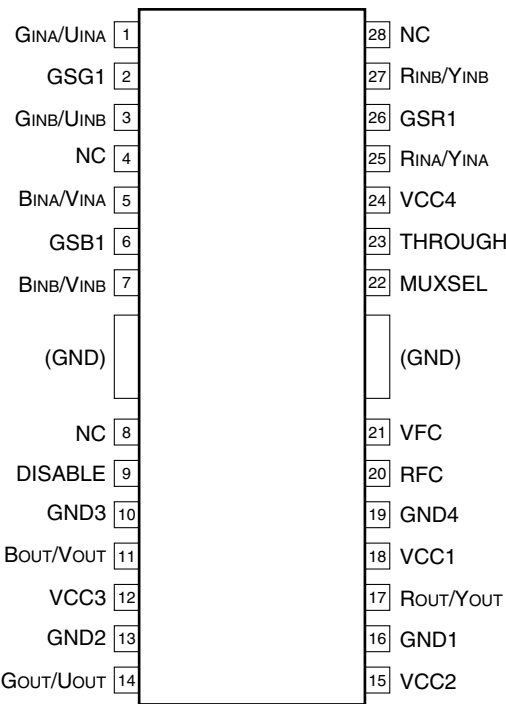
■ SM5301BS (MR MAIN BOARD ASSY : IC6401, IC6601)

A • Video Filter

● Block Diagram



● Pin Arrangement (Top view)



D

E

F

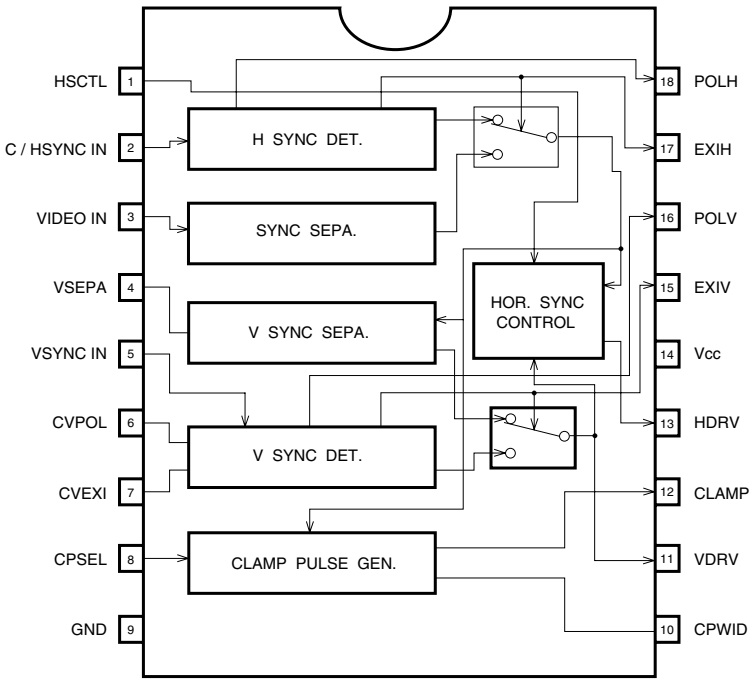
● Pin Function

No.	Pin Name	I/O	Pin Function
1	GINA/UINA	I	Analog GINA or UINA signal input. Sync signal is input on SYNCIN pin.
2	GSG1	I	GOUT/UOUT output buffer gain set input
3	GINB/UINB	I	Analog GINB or UINB signal input. Sync signal is input on SYNCIN pin.
4	(NC)	–	No connection
5	BINA/VINA	I	Analog BINA or VINA signal input. Sync signal is input on SYNCIN pin.
6	GSB1	I	BOUT/VOOUT output buffer gain set input
7	BINB/VINB	I	Analog BINB or VINB signal input. Sync signal is input on SYNCIN pin.
8	(NC)	–	No connection
9	DISABLE	I	Power save function. Built-in pull-down resistor. L : Enable H : Disable (Output pins: ROUT/YOUT, GOUT/UOUT, and BOUT/VOOUT are high impedance.)
10	GND3	–	Analog ground
11	BOUT/VOOUT	O	B/V signal output
12	VCC3	–	Analog 5V supply
13	GND2	–	Analog ground
14	GOUT/UOUT	O	G/U signal output
15	VCC2	–	Analog 5V supply
16	GND1	–	Analog ground
17	ROUT/YOUT	O	R/Y signal output
18	VCC1	–	Analog 5V supply
19	GND4	–	Analog ground
20	RFC	–	LPF (lowpass filter) cutoff frequency setting resistor connection
21	VFC	I	LPF (lowpass filter) cutoff frequency setting voltage input
22	MUXSEL	I	Input select signal. Built-in pull-down resistor. L : XINA pin select H : XINB pin select
23	THROUGH	I	Filter through Built-in pull-down resistor. L : Filter function H : Filter through (buffer only)
24	VCC4	–	Analog 5V supply
25	RINA/YINA	I	Analog RINA or YINA signal input. Sync signal is input on SYNCIN pin.
26	GSR1	I	ROUT/YOUT output buffer gain set input
27	RINB/YINB	I	Analog RINB or YINB signal input. Sync signal is input on SYNCIN pin.
28	(NC)	–	No connection

■ **BA7078AF (MR MAIN BOARD ASSY : IC6404, IC6604)**

• Multi Sync Separation IC

● **Block Diagram**



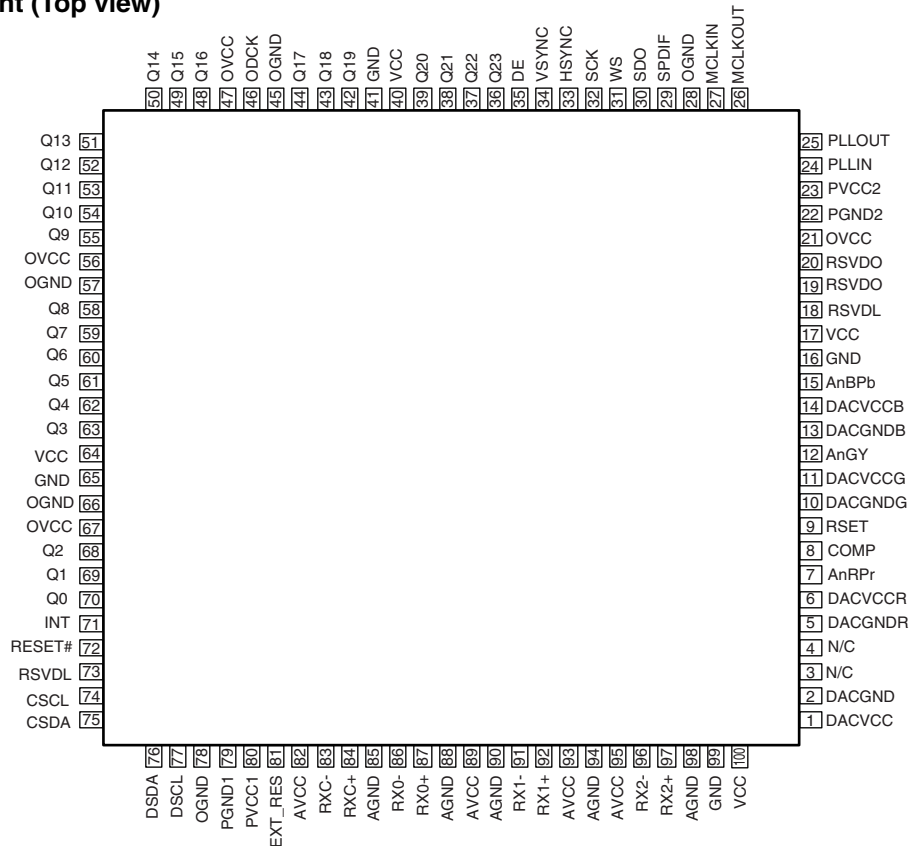
● Pin Function

No.	Pin Name	Pin Function
1	HSCTL	HDRV output Used to select whether to output the VDRV section of the HDRV output signal. High : VDRV section of HDRV is output Low : VDRV section of HDRV is not output
2	C/HSYNC IN	Composite sync / H SYNC input Input either the composite synchronization signal or the horizontal synchronization signal. Input is clamped, and is initiated by capacitor coupling.
3	VIDEO IN	SYNC ON VIDEO input Inputs the SYNC ON VIDEO signal(green). Input is sink chip clamped. Input is initiated by capacitor coupling.
4	VSEPA	f-V conversion Converts the horizontal synchronization signal frequency into a voltage. The voltage generated is proportional to the frequency of the horizontal synchronization signal. Attach a 0.56 μ F capacitor between the ground pins.
5	VSYNC IN	V SYNC input Inputs the vertical synchronization signal.
6	CVPOL	Vertical polarity integration Integrates the vertical synchronization signal polarity detection circuit. Attach a 1.5 μ F capacitor between this pin and the ground.
7	CVEXI	Vertical existence integration Integrates the vertical synchronization signal existence detection circuit. Attach a 1 μ F capacitor between this pin and the ground.
8	CPSEL	Setting the clamp position Used to set the clamp pulse generation position to either the front or back edge of HSYNC High : The front edge is the generation position Open : Composite / H SYNC IN : The front edge is the generation position VIDEO IN : The back edge is the generation position Low : The back edge is the generation position
9	GND	Ground
10	CPWID	Setting the clamp pulse width Sets the clamp pulse width according to the attached time constant. Attach a resistor between this pin and VCC and, a capacitor between this pin and GND. When R = 3.9k Ω and C = 100pF, pulse width is approximately 400 ns. Set the resistor to register an abnormality at 1k Ω .
11	VDRV	VDRV output Outputs the vertical synchronization signal. The output signal has positive polarity.
12	CLAMP	Clamp output Outputs the clamp pulse generated from the vertical synchronization signal. The output signal has a positive polarity.
13	HDRV	HDRV output Outputs the clamp pulse generated from the horizontal synchronization signal. The output signal has positive polarity.
14	Vcc	Power supply
15	EXIV	Vertical existence output Indicates whether the vertical synchronization signal exists.
16	POLV	Vertical polarity output Indicates the polarity of the vertical synchronization signal.
17	EXIH	Horizontal existence output Indicates whether the horizontal synchronization signal exists.
18	POLH	Horizontal polarity output Indicates the polarity of the horizontal synchronization signal.

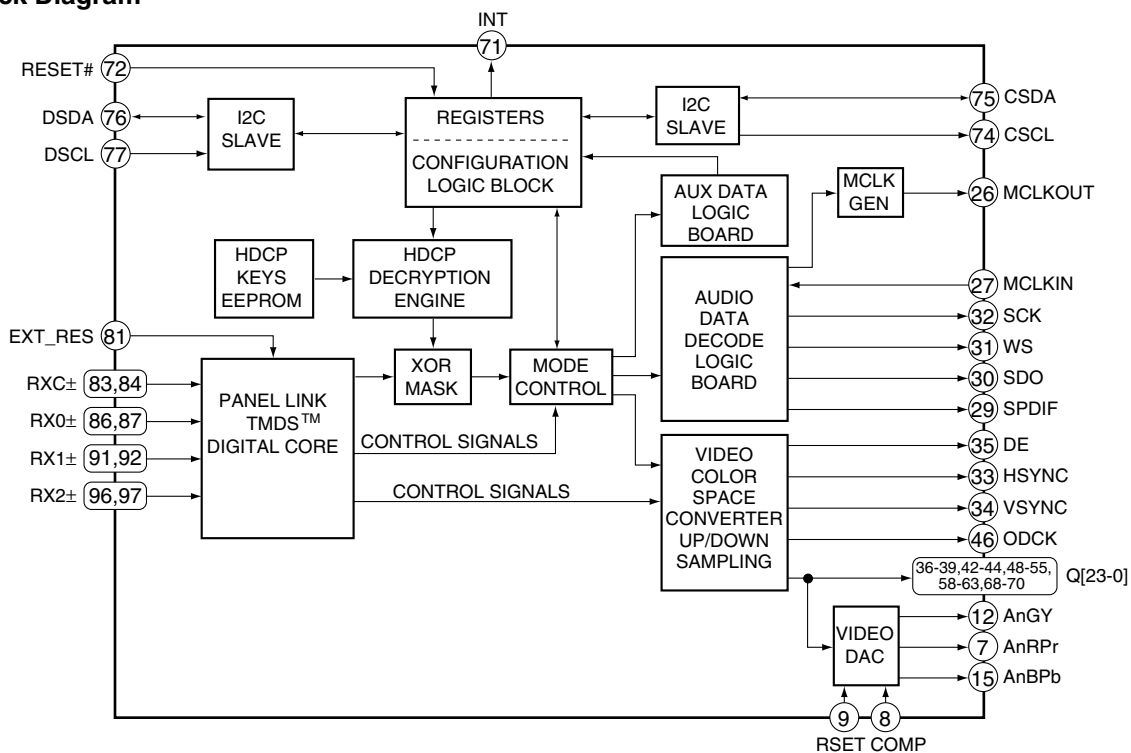
SII9993CTG100 (MR MAIN BOARD ASSY : IC6881, IC6801)

• HDCP Panel Link Receiver

• Pin Arrangement (Top view)



• Block Diagram



● Pin Function

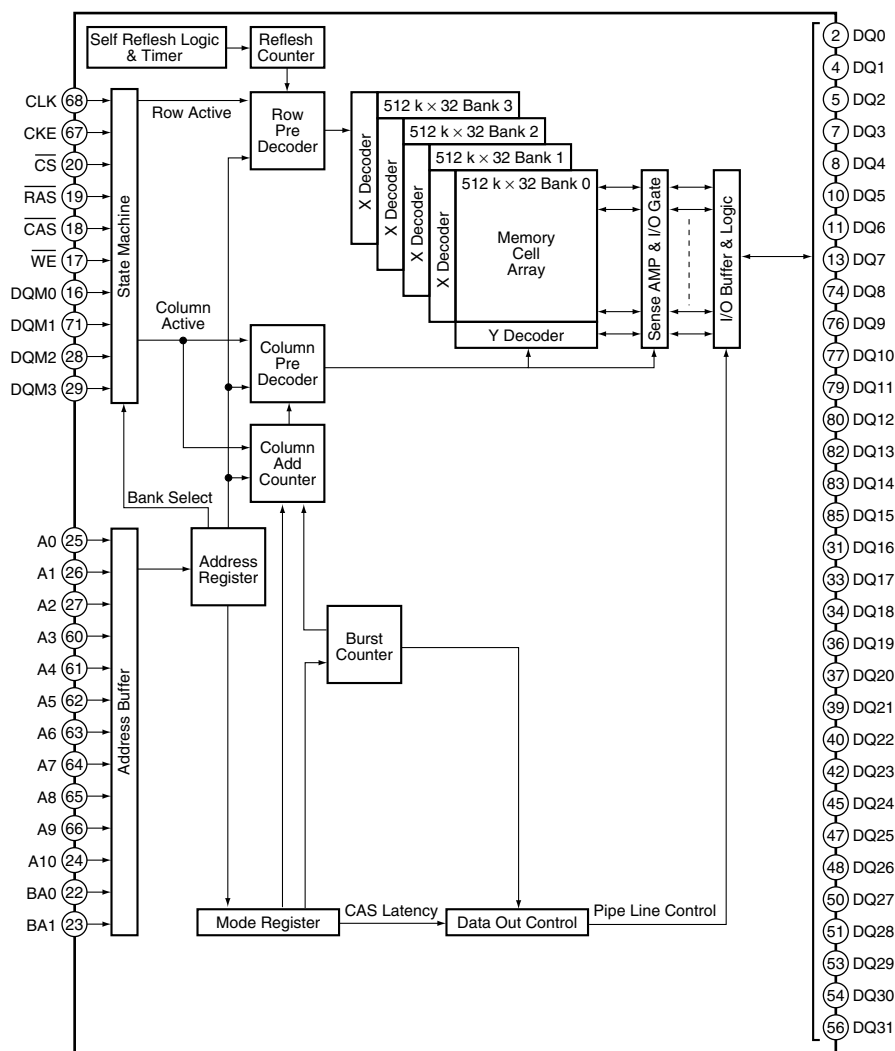
No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
1	DACVCC	–	DAC power supply (3.3V)	51	Q13	O	24-bit output pixel data bus
2	DACGND	–	DAC ground	52	Q12	O	24-bit output pixel data bus
3	N/C	–	No connection	53	Q11	O	24-bit output pixel data bus
4	N/C	–	No connection	54	Q10	O	24-bit output pixel data bus
5	DACGNDR	–	DAC Red ground	55	Q9	O	24-bit output pixel data bus
6	DACVCCR	–	DAC Red power supply (3.3V)	56	OVCC	–	Output bus power supply (3.3V)
7	AnRPr	O	Red, Pr output of analog video	57	OGND	–	Output bus ground
8	COMP	I	For reference amp. correction of DAC inside	58	Q8	O	24-bit output pixel data bus
9	RSET	I	Full scale adjustment resistor input	59	Q7	O	24-bit output pixel data bus
10	DACGNDR	–	DAC Green ground	60	Q6	O	24-bit output pixel data bus
11	DACVCCG	–	DAC Green power supply (3.3V)	61	Q5	O	24-bit output pixel data bus
12	AnGY	O	Green, Y output of analog video	62	Q4	O	24-bit output pixel data bus
13	DACGNDB	–	DAC Blue ground	63	Q3	O	24-bit output pixel data bus
14	DACVCCB	–	DAC Blue power supply (3.3V)	64	VCC	–	Digital power supply (3.3V)
15	AnBPb	O	Blue, Pb output of analog video	65	GND	–	Digital ground
16	GND	–	Digital ground	66	OGND	–	Output bus ground
17	VCC	–	Digital power supply (3.3V)	67	OVCC	–	Output bus power supply (3.3V)
18	RSVDL	I	Reserved Fixed to low.	68	Q2	O	24-bit output pixel data bus
19	RSVDD	O	Reserved No connection	69	Q1	O	24-bit output pixel data bus
20	RSVDD	O	Reserved No connection	70	Q0	O	24-bit output pixel data bus
21	OVCC	–	Output bus power supply (3.3V)	71	INT	O	Interruption output
22	PGND2	–	Audio PLL ground	72	RESET#	I	Reset Activ low.
23	PVCC2	–	Audio PLL power supply (3.3V)	73	RSVDL	I	Reserved Fixed to low.
24	PLLIN	I/O	PLL filter input	74	CSCL	I	Configuration I2C clock
25	PLLOUT	I/O	PLL filter output	75	CSDA	I/O	Configuration I2C data
26	MCCLKOUT	O	Audio master clock output	76	DSDA	I/O	DDC I2C data
27	MCCLKIN	I	Reference audio master clock input	77	DSCL	I	DDC I2C clock
28	OGND	–	Output bus ground	78	OGND	–	Output bus ground
29	SPDIF	O	SPDIF audio output	79	PGND1	–	PLL ground
30	SDO	O	I2S serial data output	80	PVCC1	–	PLL power supply (3.3V)
31	WS	O	I2S word selecting output	81	EXT_RES	I	Input impedance adjustment
32	SCK	O	I2S serial clock output	82	AVCC	–	Analog power supply (3.3V)
33	HSYNC	O	Horizontal sync. control signal output	83	RXC-	I	TMDS data input
34	VSNC	O	Vertical sync. control signal output	84	RXC+	I	TMDS data input
35	DE	O	Data enable	85	AGND	–	Analog ground
36	Q23	O	24-bit output pixel data bus	86	RX0-	I	TMDS data input
37	Q22	O	24-bit output pixel data bus	87	RX0+	I	TMDS data input
38	Q21	O	24-bit output pixel data bus	88	AGND	–	Analog ground
39	Q20	O	24-bit output pixel data bus	89	AVCC	–	Analog power supply (3.3V)
40	VCC	–	Digital power supply (3.3V)	90	AGND	–	Analog ground
41	GND	–	Digital ground	91	RX1-	I	TMDS data input
42	Q19	O	24-bit output pixel data bus	92	RX1+	I	TMDS data input
43	Q18	O	24-bit output pixel data bus	93	AVCC	–	Analog power supply (3.3V)
44	Q17	O	24-bit output pixel data bus	94	AGND	–	Analog ground
45	OGND	–	Output bus ground	95	AVCC	–	Analog power supply (3.3V)
46	ODCK	O	Data clock output	96	RX2-	I	TMDS data input
47	OVCC	–	Output bus power supply (3.3V)	97	RX2+	I	TMDS data input
48	Q16	O	24-bit output pixel data bus	98	AGND	–	Analog ground
49	Q15	O	24-bit output pixel data bus	99	GND	–	Digital ground
50	Q14	O	24-bit output pixel data bus	100	VCC	–	Digital power supply (3.3V)

HY57V643220CT-7 (MR MAIN BOARD ASSY : IC7001, IC7002)

(or K4S643232H-TC60-K)

• Synchronous DRAM

Block Diagram



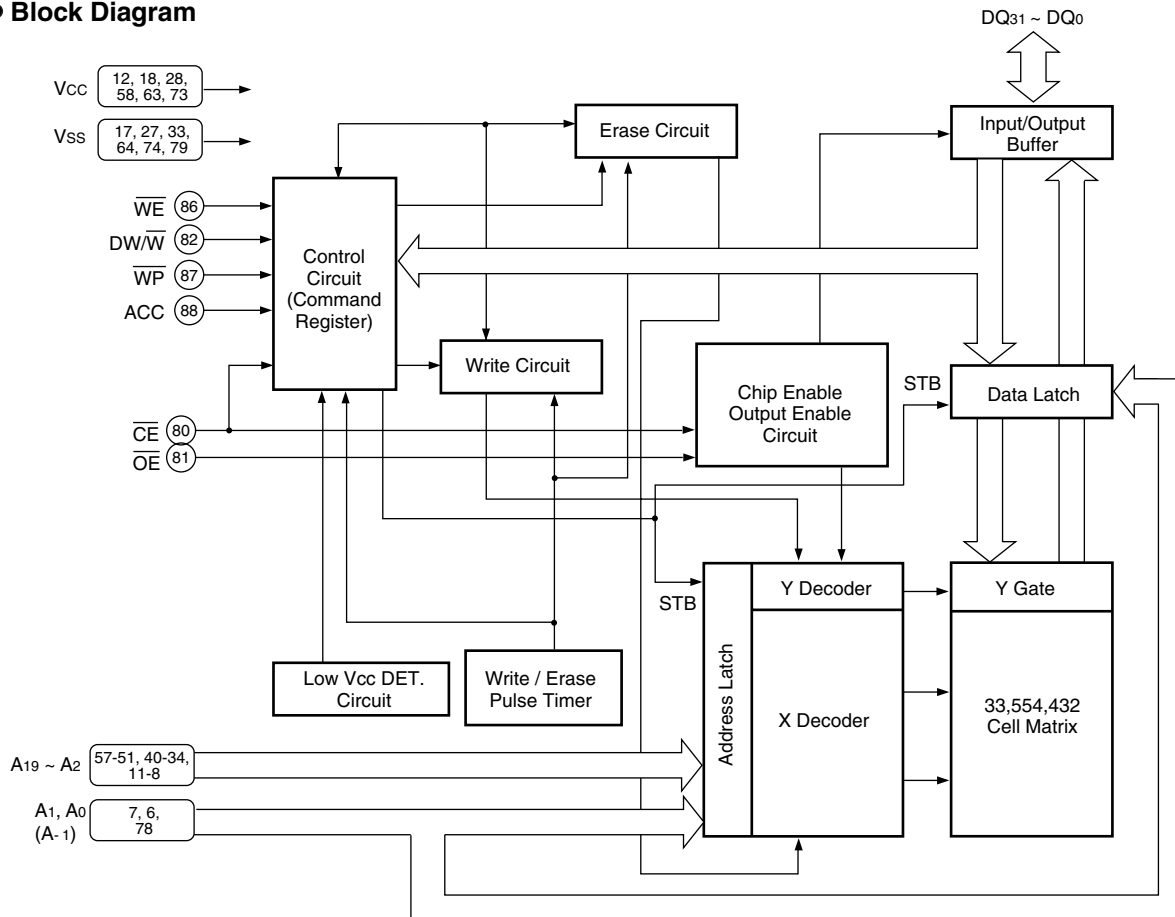
● Pin Function

No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
1	VDD	–	Power supply	44	VSS	–	Ground
2	DQ0	I/O	Data input/output	45	DQ24	I/O	Data input/output
3	VDDQ	–	Power supply for output buffer	46	VSSQ	–	Ground for output buffer
4	DQ1	I/O	Data input/output	47	DQ25	I/O	Data input/output
5	DQ2	I/O	Data input/output	48	DQ26	I/O	Data input/output
6	VSSQ	–	Ground for output buffer	49	VDDQ	–	Power supply for output buffer
7	DQ3	I/O	Data input/output	50	DQ27	I/O	Data input/output
8	DQ4	I/O	Data input/output	51	DQ28	I/O	Data input/output
9	VDDQ	–	Power supply for output buffer	52	VSSQ	–	Ground for output buffer
10	DQ5	I/O	Data input/output	53	DQ29	I/O	Data input/output
11	DQ6	I/O	Data input/output	54	DQ30	I/O	Data input/output
12	VSSQ	–	Ground for output buffer	55	VDDQ	–	Power supply for output buffer
13	DQ7	I/O	Data input/output	56	DQ31	I/O	Data input/output
14	NC	–	No connection	57	NC	–	No connection
15	VDD	–	Power supply	58	VSS	–	Ground
16	DQM0	I	Data input/output mask	59	DQM3	I	Data input/output mask
17	/WE	I	Write enable	60	A3	I	Address input
18	/CAS	I	Column address strobe	61	A4	I	Address input
19	/RAS	I	Row address strobe	62	A5	I	Address input
20	/CS	I	Chip select input	63	A6	I	Address input
21	NC	–	No connection	64	A7	I	Address input
22	BA0	I	Bank address input	65	A8	I	Address input
23	BA1	I	Bank address input	66	A9	I	Address input
24	A10/AP	I	Address input	67	CKE	I	Clock enable
25	A0	I	Address input	68	CLK	I	System clock input
26	A1	I	Address input	69	NC	–	No connection
27	A2	I	Address input	70	NC	–	No connection
28	DQM2	I	Data input/output mask	71	DQM1	I	Data input/output mask
29	VDD	–	Power supply	72	VSS	–	Ground
30	NC	–	No connection	73	NC	–	No connection
31	DQ16	I/O	Data input/output	74	DQ8	I/O	Data input/output
32	VSSQ	–	Ground for output buffer	75	VDDQ	–	Power supply for output buffer
33	DQ17	I/O	Data input/output	76	DQ9	I/O	Data input/output
34	DQ18	I/O	Data input/output	77	DQ10	I/O	Data input/output
35	VDDQ	–	Power supply for output buffer	78	VSSQ	–	Ground for output buffer
36	DQ19	I/O	Data input/output	79	DQ11	I/O	Data input/output
37	DQ20	I/O	Data input/output	80	DQ12	I/O	Data input/output
38	VSSQ	–	Ground for output buffer	81	VDDQ	–	Power supply for output buffer
39	DQ21	I/O	Data input/output	82	DQ13	I/O	Data input/output
40	DQ22	I/O	Data input/output	83	DQ14	I/O	Data input/output
41	VDDQ	–	Power supply for output buffer	84	VSSQ	–	Ground for output buffer
42	DQ23	I/O	Data input/output	85	DQ15	I/O	Data input/output
43	VDD	–	Power supply	86	VSS	–	Ground

MBM29PL3200BE70PFV (MR MAIN BOARD ASSY : IC7151, IC7152)

• Page Mode Flash Memory

• Block Diagram



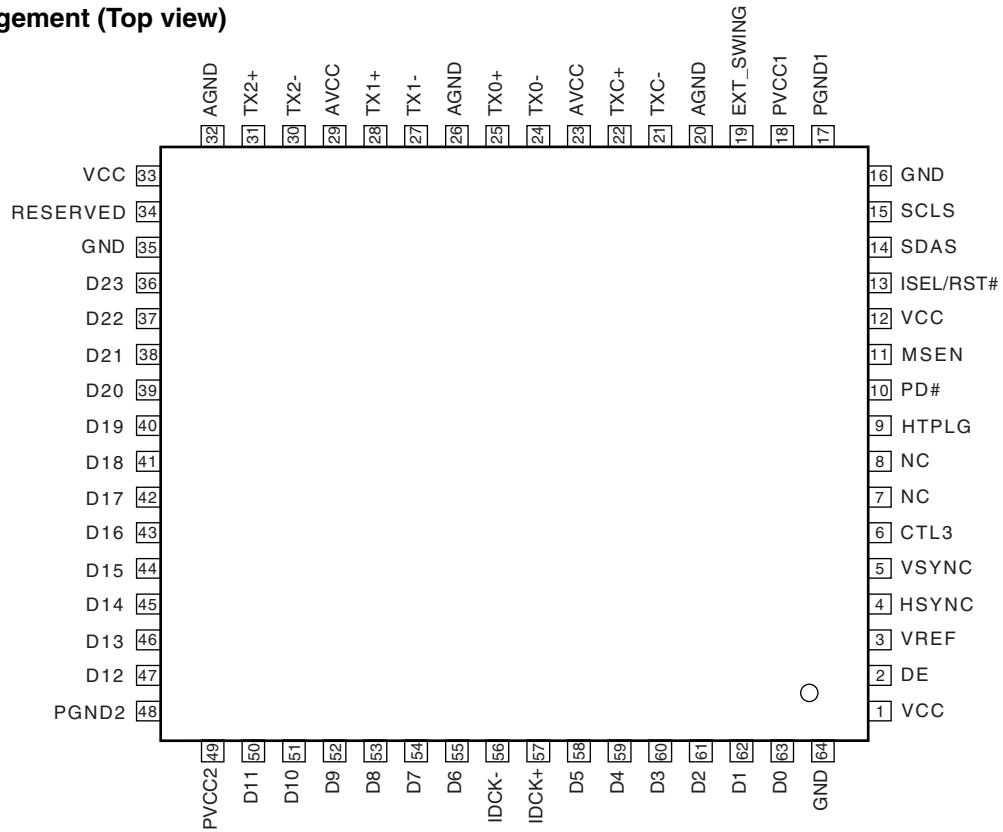
• Pin Function

No.	Pin Name	I/O	Pin Function
57-51, 40-34, 11-6, 78	A19 - A0, A-1	I	Address input
78-75, 72-65, 62-59, 32-19, 26-19, 16-13	DQ31 - DQ0	I/O	Data input/output
80	CE	I	Chip enable
81	OE	I	Output enable
86	WE	I	Write enable
82	DW/W	I	16 bit, 32 bit mode switch
87	WP	I	Write protect
88	ACC	I	Acceleration
17, 27, 33, 64, 74, 79	Vss	—	Ground
12, 18, 28, 58, 63, 73	Vcc	—	Power supply
1-5, 41-50, 83-85, 89, 90	N.C.	—	No connection

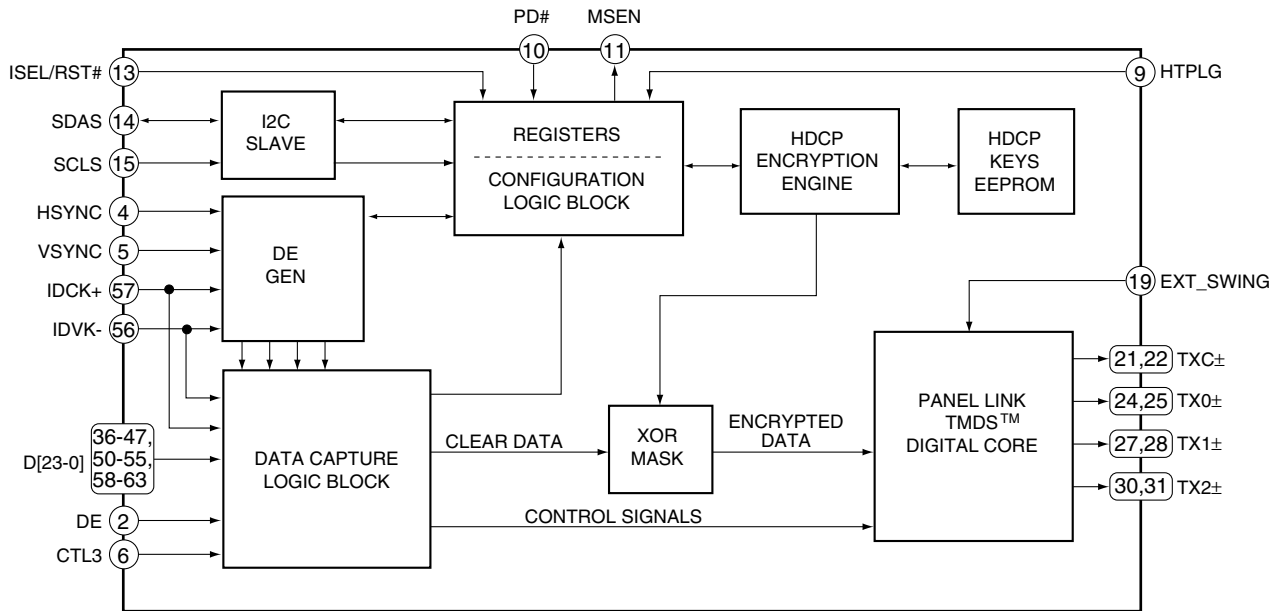
■ SII170BCLG64 (MR MAIN BOARD ASSY : IC7401)

• HDCP Panel Link Transmitter

● Pin Arrangement (Top view)



● Block Diagram



● Pin Function

A

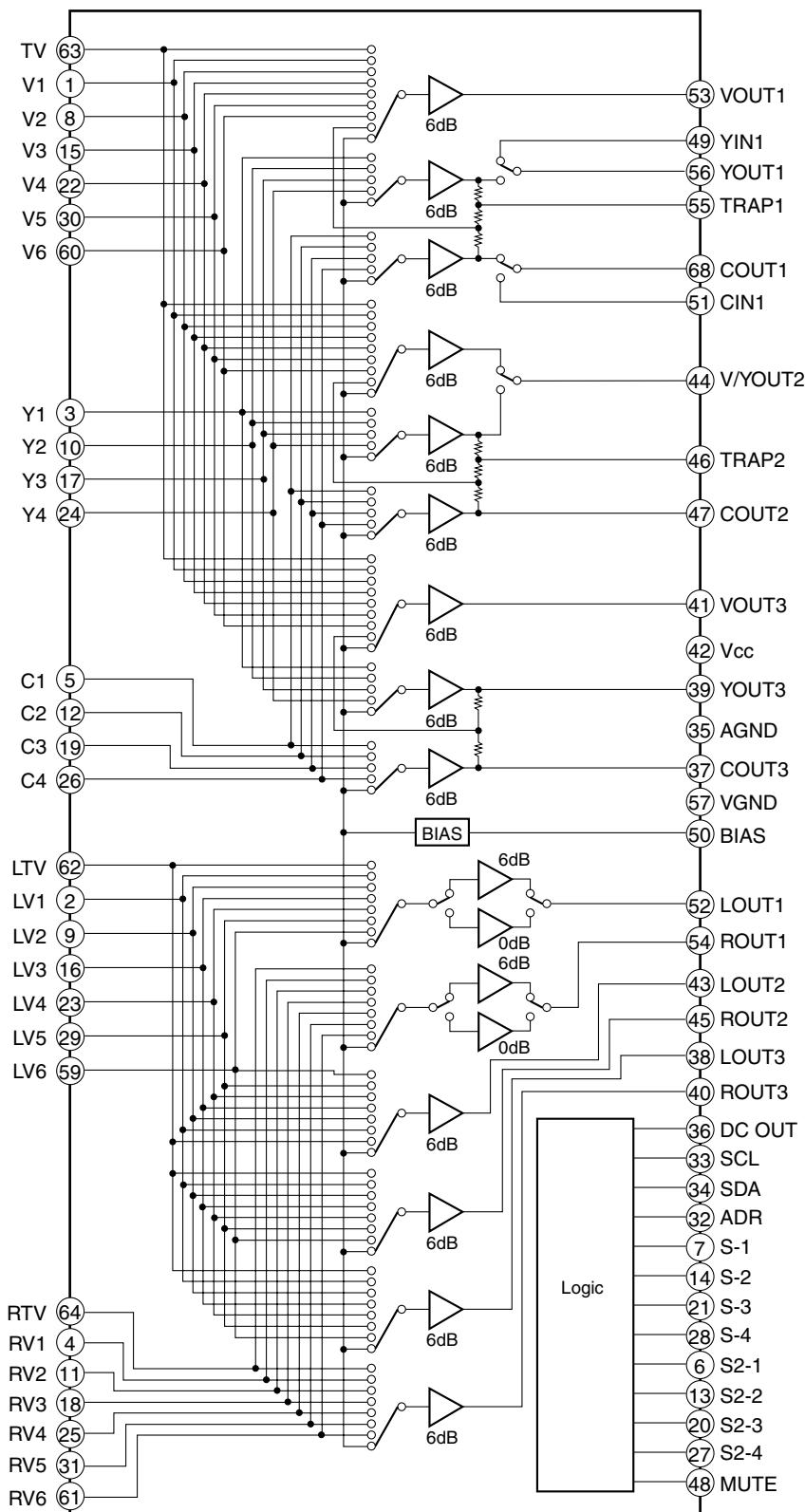
No.	Pin Name	I/O	Pin Function
1	VCC	–	Digital power supply (3.3V)
2	DE	I	Data enable
3	VREF	I	3.3V fixed
4	HSYNC	I	Horizontal sync. control signal input
5	VSYNC	I	Vertical sync. control signal input
6	CTL3	I	External CTL3 input
7	NC	–	No connection
8	NC	–	No connection
9	HTPLG	I	Monitor chrage input
10	PD#	I	Power down input (Active low)
11	MSEN	O	Monitor sense output (open-collector output)
12	VCC	–	Digital power supply (3.3V)
13	ISEL/RST#	I	I2C interface selecting input High: I2C interface is active
14	SDAS	I/O	DDC I2C data input/output
15	SCLS	I	DDC I2C clock input
16	GND	–	Digital ground
17	PGND1	–	PLL analog ground
18	PVCC1	–	Analog power supply for PLL of primary side (3.3V)
19	EXT_SWING	I	Voltage regulation adjustment
20	AGND	–	Analog ground
21	TXC-	O	Differential signal clock output of TMDS Low voltage
22	TXC+	O	Differential signal clock output of TMDS Low voltage
23	AVCC	–	Analog power supply (3.3V)
24	TX0-	O	Differential signal clock output of TMDS Low voltage
25	TX0+	O	Differential signal clock output of TMDS Low voltage
26	AGND	–	Analog ground
27	TX1-	O	Differential signal clock output of TMDS Low voltage
28	TX1+	O	Differential signal clock output of TMDS Low voltage
29	AVCC	–	Analog power supply (3.3V)
30	TX2-	O	Differential signal clock output of TMDS Low voltage
31	TX2+	O	Differential signal clock output of TMDS Low voltage
32	AGND	–	Analog ground
33	VCC	–	Digital power supply (3.3V)
34	RESERVED	I	Reserved pin for Silicon Image Normally, fixed to low.
35	GND	–	Digital ground
36	D23	I	24-bit pixel bus input
37	D22	I	24-bit pixel bus input
38	D21	I	24-bit pixel bus input
39	D20	I	24-bit pixel bus input
40	D19	I	24-bit pixel bus input
41	D18	I	24-bit pixel bus input
42	D17	I	24-bit pixel bus input
43	D16	I	24-bit pixel bus input
44	D15	I	24-bit pixel bus input
45	D14	I	24-bit pixel bus input

No.	Pin Name	I/O	Pin Function
46	D13	I	24-bit pixel bus input
47	D12	I	24-bit pixel bus input
48	PGND2	–	PLL analog ground
49	PVCC2	–	Analog power supply for filter PLL (3.3V)
50	D11	I	24-bit / 12-bit pixel bus input
51	D10	I	24-bit / 12-bit pixel bus input
52	D9	I	24-bit / 12-bit pixel bus input
53	D8	I	24-bit / 12-bit pixel bus input
54	D7	I	24-bit / 12-bit pixel bus input
55	D6	I	24-bit / 12-bit pixel bus input
56	IDCK-	I	Data clock - input
57	IDCK+	I	Data clock + input
58	D5	I	24-bit / 12-bit pixel bus input
59	D4	I	24-bit / 12-bit pixel bus input
60	D3	I	24-bit / 12-bit pixel bus input
61	D2	I	24-bit / 12-bit pixel bus input
62	D1	I	24-bit / 12-bit pixel bus input
63	D0	I	24-bit / 12-bit pixel bus input
64	GND	–	Digital ground

■ CXA2069Q (AV BOARD ASSY : IC8002)

A • 7-Input 3-Output Audio/Video Switch

● Block Diagram



● Pin Function

No.	Pin Name	I/O	Pin Function
63 1 8 15 22 30 60	TV V1 V2 V3 V4 V5 V6	I	Video signal inputs. Input composite video signals.
3 10 17 24 49	Y1 Y2 Y3 Y4 YIN1	I	Y/C separation signal inputs. Input luminance signals. The YIN1 pin inputs the signal obtained by Y/C separating the VOUT1 pin output.
5 12 19 26 51	C1 C2 C3 C4 CIN1	I	Y/C separation signal inputs. Input chrominance signals. The CIN1 pin inputs the signal obtained by Y/C separating the VOUT1 pin output.
62, 2 9, 16 23, 29 59, 64 4, 11 18, 25 31, 61	LTV, LV1 LV2, LV3 LV4, LV5 LV6, RTV RV1, RV2 RV3, RV4 RV5, RV6	I	Audio signal inputs.
53 41	VOUT1 VOUT3	O	Video signal outputs. Output composite video signals.
44	V/YOUT2	O	Video signal output. Either composite video signal output or luminance signal output can be selected by I2C bus control.
56 39	YOUT1 YOUT3	O	Video signal outputs. Output luminance signals.
58 47 37	COUT1 COUT2 COUT3	O	Video signal outputs. Output chrominance signals.
52 43 38 54 45 40	LOUT1 LOUT2 LOUT3 ROUT1 ROUT2 ROUT3	O	Audio signal outputs. Zo=50 ohm (within DC ± 2mA)
6 13 20 27	S2-1 S2-2 S2-3 S2-4	—	Detects the S2-compatible DC superimposed onto the C signal. 4 : 3 video signal at 1.3 V or less 4 : 3 letter-box signal at 1.3 V or more to 2.5 V or less 16 : 9 picture squeezed signal at 2.5 V or more This pin is pulled down to GND by a 100 k ohm resistor, so the 4 : 3 video signal is selected when open.

A

No.	Pin Name	I/O	Pin Function										
7 14 21 28	S-1 S-2 S-3 S-4	—	Composite video/S selector. The detection results are written to the status register. S signal at 3.5 V or less. Composite video signal at 3.5 V or more. This pin is pulled up to 5 V by a 100 k ohm resistor, so the composite video signal is selected when open.										
32	ADR	—	Selects the slave address for the I2C bus. 90H at 1.5 V or less 92H at 2.5 V or more 90H when open.										
33	SCL	I	I2C bus signal input VILmax=1.5 V VIHmin=3.0 V										
34	SDA	I	I2C bus signal input VILmax=1.5 V VIHmin=3.0 V VOLmax=0.4 V										
36	DC_OUT	O	Outputs the S2-compatible DC superimposed onto the COUT3 output. The DC is superimposed by connecting this pin to the COUT3 output via a capacitor. Control is performed by the I2C bus. When 0 V is output, Q1 is ON and the impedance is 5 k ohm. S2 protocol output impedance of 10 ± 3 k ohm is realized by attaching external resistance of 4.7 k ohm. <table><tr><td>DC_OUT (bus)</td><td>Output DC</td></tr><tr><td>0</td><td>4.5 V</td></tr><tr><td>1</td><td>0 V</td></tr><tr><td>2</td><td>1.9 V</td></tr><tr><td>3</td><td>4.5 V</td></tr></table>	DC_OUT (bus)	Output DC	0	4.5 V	1	0 V	2	1.9 V	3	4.5 V
DC_OUT (bus)	Output DC												
0	4.5 V												
1	0 V												
2	1.9 V												
3	4.5 V												
55 46	TRAP1 TRAP2	—	Connects trap circuit for subcarrier.										
48	MUTE	—	Audio signal output mute. Mute OFF at 1.5 V or less Mute ON at 2.5 V or more Mute OFF when open.										
50	BIAS	—	Internal reference bias (VCC/2). Connect to GND via a capacitor.										

B

D

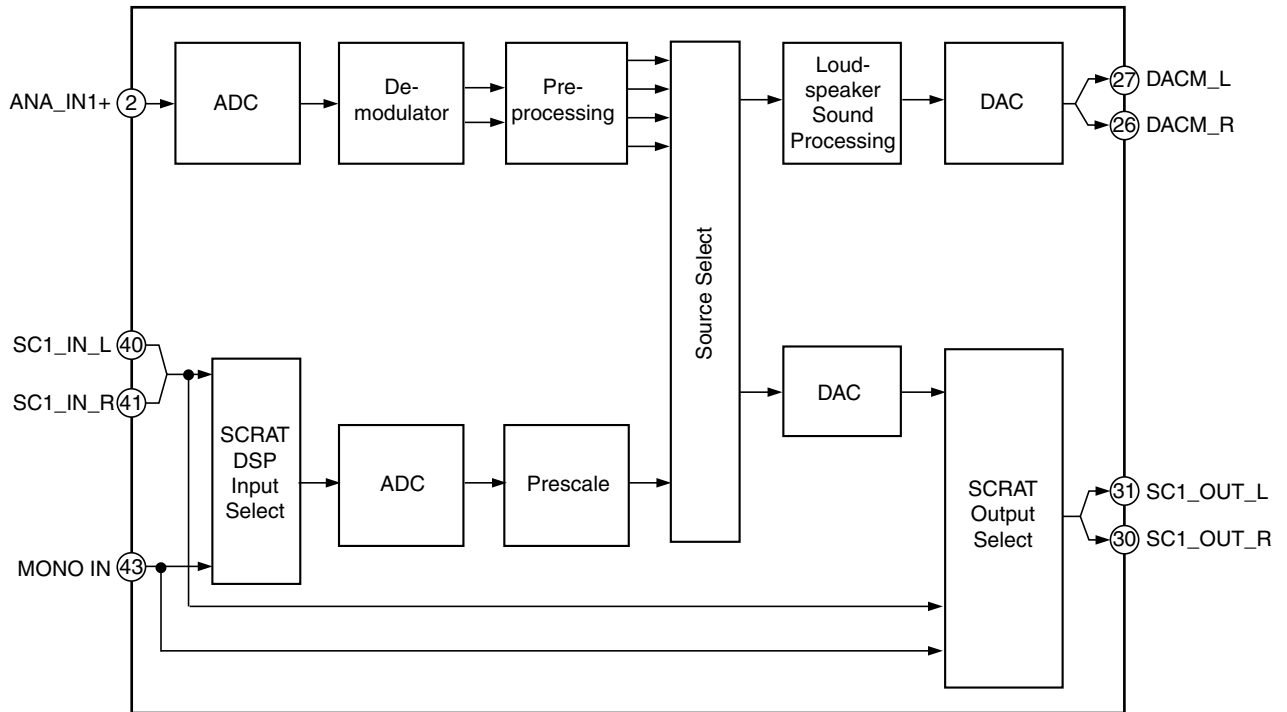
E

F

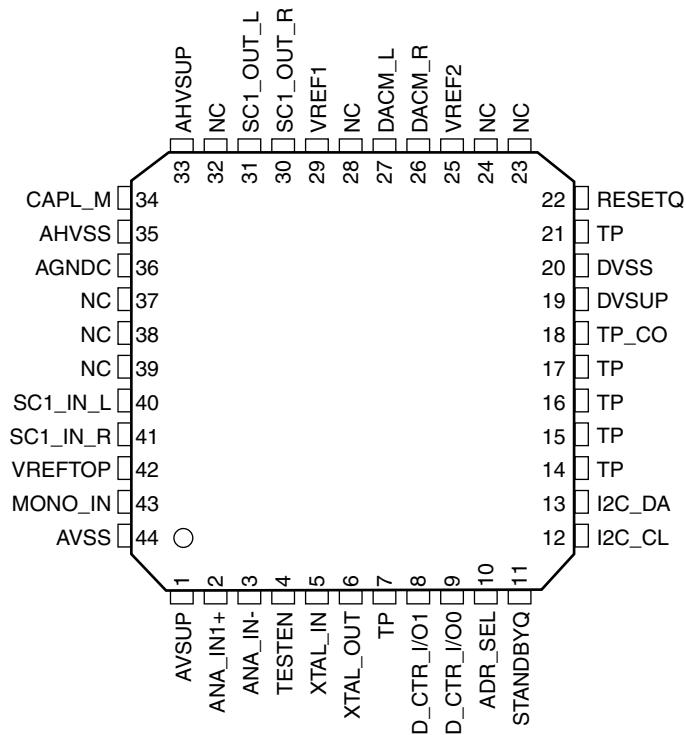
■ MSP3417G (AV BOARD ASSY : IC7502)

• Multisound Processor

● Block Diagram



● Pin Arrangement (Top view)



● Pin Function

NC = Not connected; leave vacant
 LV = if not used, leave vacant
 DVSS: if not used, connect to DVSS

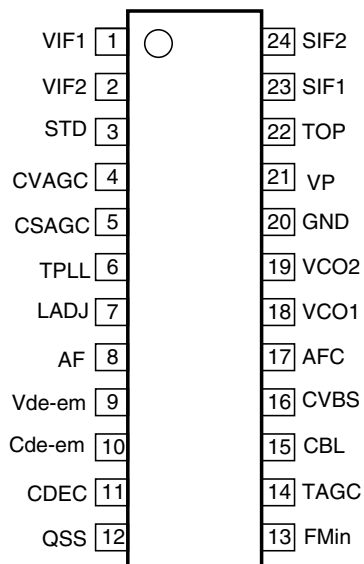
X = obligatory; connect as described in circuit diagram
 AHVSS: connect to AHVSS

No.	Pin Name	Type	Connection (it not used)	Description
1	AVSUP		X	Analog power supply +5V
2	ANA_IN1+	IN	LV	IF input1
3	ANA_IN-	IN	LV	IF common
4	TESTEN	IN	X	Test pin
5	XTAL_IN	IN	X	Crystal oscillator
6	XTAL_OUT	OUT	X	Crystal oscillator
7	TP		LV	Test pin
8	D_CTR_I/O_1	IN/OUT	LV	D_CTR_I/O_1
9	D_CTR_I/O_0	IN/OUT	LV	D_CTR_I/O_0
10	ADR_SEL	IN	X	I2C Bus address select
11	STANDBYQ	IN	X	Standby (low-active)
12	I2C_CL	IN/OUT	X	I2C clock
13	I2C_DA	IN/OUT	X	I2C data
14	TP		LV	Test pin
15	TP		LV	Test pin
16	TP		LV	Test pin
17	TP		LV	Test pin
18	TP_CO	OUT	LV	Test pin
19	DVSUP		X	Digital power supply +5V
20	DVSS		X	Digital ground
21	TP		LV	Test pin
22	RESETQ	IN	X	Power-on-reset
23	NC		LV	Not connected
24	NC		LV	Not connected
25	VREF2		X	Reference ground 2 high-voltage part
26	DACM_R	OUT	LV	Loudspeaker out, right
27	DACM_L	OUT	LV	Loudspeaker out, left
28	NC		LV	Not connected
29	VREF1		X	Reference ground 1 high-voltage part
30	SC1_OUT_R	OUT	LV	SCRAT 1 output, right
31	SC1_OUT_L	OUT	LV	SCRAT 1 output, left
32	NC		LV	Not connected
33	AHVSUP		X	Analog power supply + 8.0 V
34	CAPL_M		X	Volume capacitor MAIN
35	AHVSS		X	Analog ground
36	AGNDC		X	Analog reference voltage high-voltage part
37	NC		LV	Not connected
38	NC		LV	Not connected
39	NC		LV	Not connected
40	SC1_IN_L	IN	LV	SCRAT 1 input, left
41	SC1_IN_R	IN	LV	SCRAT 1 input, right
42	VREFTOP		X	Reference voltage IF A/D converter
43	MONO_IN	IN	LV	Mono input
44	AVSS		X	Analog ground

■ TDA9818TS (AV BOARD ASSY : IC7501)

• Single/multistandard VIF/SIF-PLL and FM-PLL/AM Demodulators

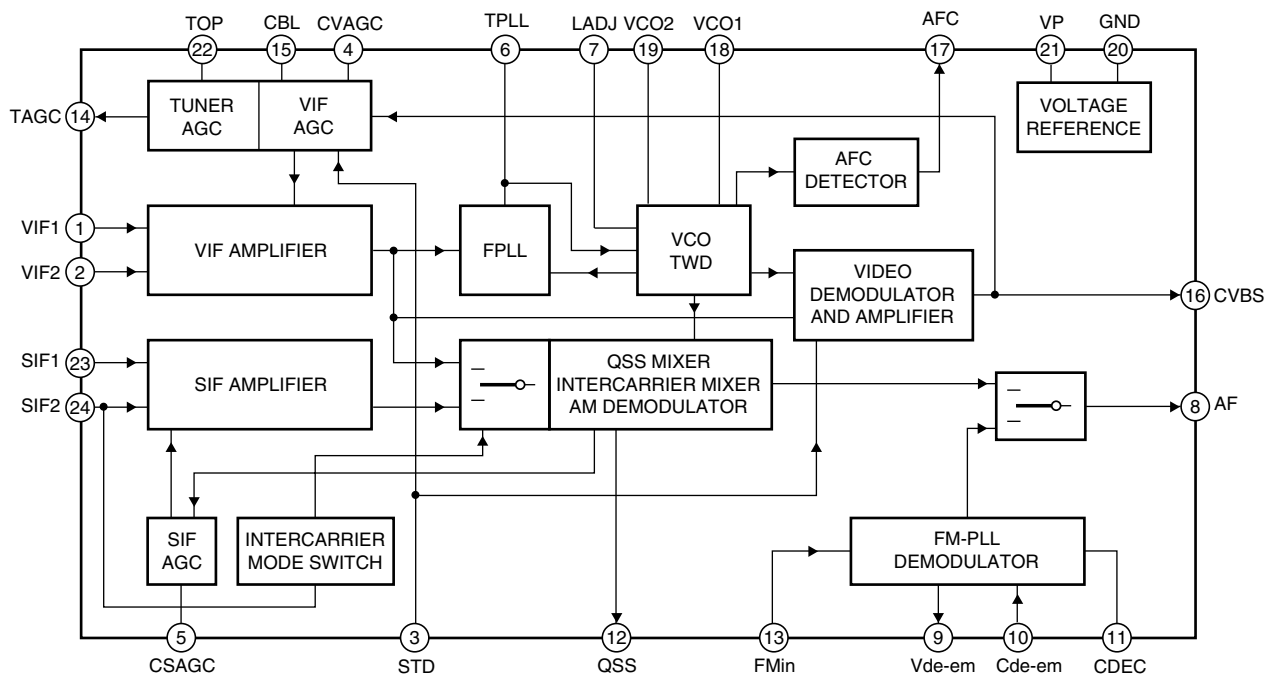
● Pin Arrangement (Top view)



● Pin Function

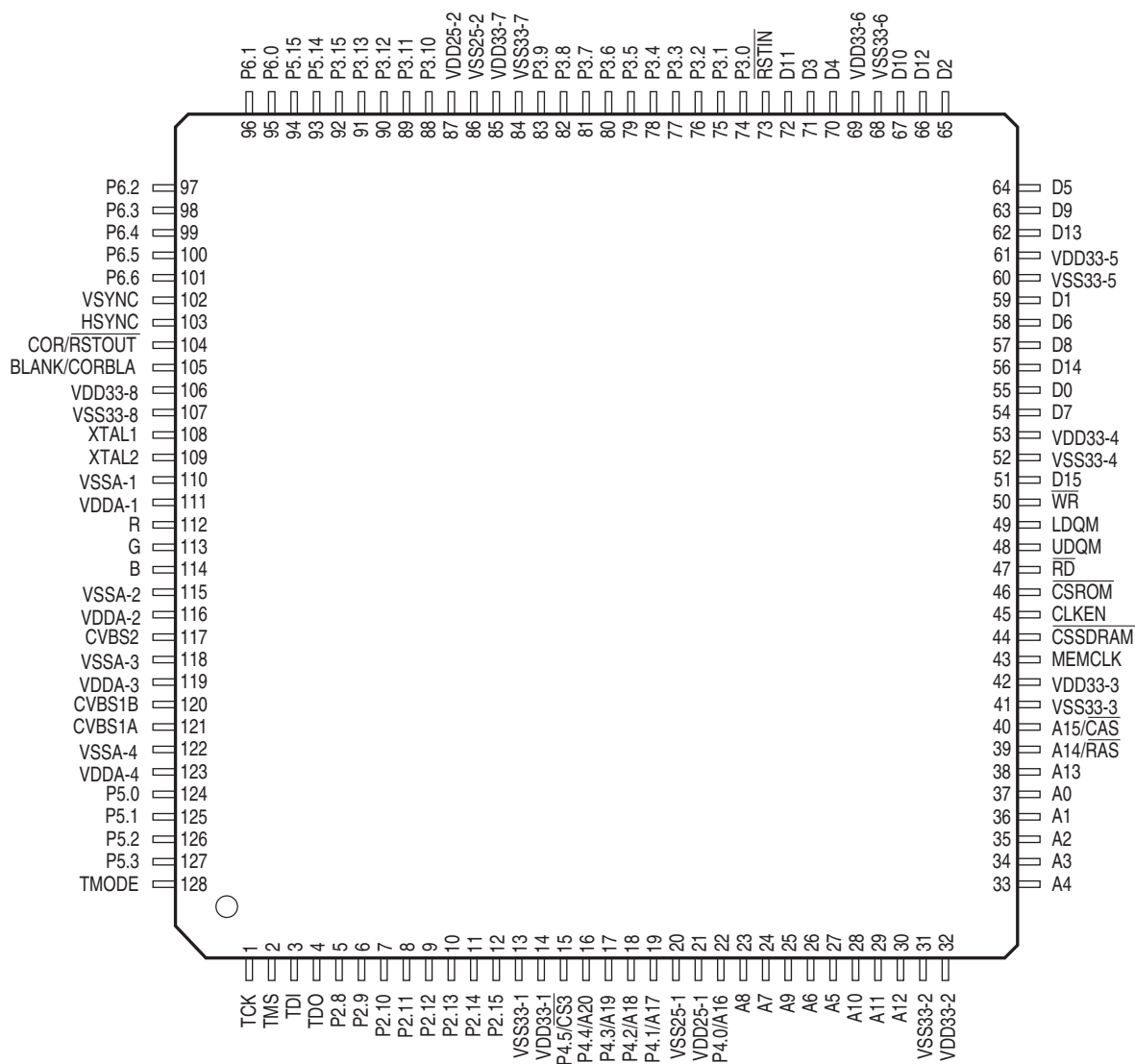
No.	Pin Name	Pin Function
1	VIF1	VIF differential input signal voltage 1
2	VIF2	VIF differential input signal voltage 2
3	STD	Standard selection switch
4	CVAGC	VIF AGC capacitor
5	CSAGC	SIF AGC capacitor
6	TPLL	PLL filter
7	LADJ	L/L accent switch and adjust
8	AF	Audio output
9	Vde-em	De-emphasis output
10	Cde-em	De-emphasis input
11	CDEC	Decoupling capacitor
12	QSS	Single reference QSS/intercarrier output voltage
13	FMin	Sound intercarrier input voltage
14	TAGC	Tuner AGC output
15	CBL	Black level detector
16	CVBS	Composite video output voltage
17	AFC	AFC output
18	VCO1	VCO1 resonance circuit
19	VCO2	VCO2 resonance circuit
20	GND	Ground
21	VP	Supply voltage
22	TOP	Tuner AGC takeover point adjust
23	SIF1	SIF differential input signal voltage 1
24	SIF2	SIF differential input signal voltage 2

● Block Diagram



SDA6000 (AV BOARD ASSY : IC8904)

- Teletext Decoder

Pin Arrangement (Top view)

● Pin Function

A

No.	Pin Name	Second Function	I/O	Pin Function
1	TCK	–	I	Clock for JTAG interface
2	TMS	–	I	Control signal for JTAG interface
3	TDI	–	I	Data input for JTAG interface
4	TDO	–	O	Data output for JTAG interface
5	P2.8	EX0IN	I/O	General purpose I/O port/External interrupt 0
6	P2.9	EX1IN	I/O	General purpose I/O port/External interrupt 1
7	P2.10	EX2IN	I/O	General purpose I/O port/External interrupt 2
8	P2.11	EX3IN	I/O	General purpose I/O port/External interrupt 3
9	P2.12	EX4IN	I/O	General purpose I/O port/External interrupt 4
10	P2.13	EX5IN	I/O	General purpose I/O port/External interrupt 5
11	P2.14	EX6IN	I/O	General purpose I/O port/External interrupt 6
12	P2.15	EX7IN	I/O	General purpose I/O port/External interrupt 7
13	VSS33-1	–	–	Digital ground for pads
14	VDD33-1	–	–	Digital power (for pads) (3.3 V)
15	P4.5	CS3	O	General purpose output port/Chip select signal for second external static memory
16	P4.4	A20	O	General purpose output port/Address bit
17	P4.3	A19	O	General purpose output port/Address bit
18	P4.2	A18	O	General purpose output port/Address bit
19	P4.1	A17	O	General purpose output port/Address bit
20	VSS25-1	–	–	Digital ground (for digital core)
21	VDD25-1	–	–	Digital power (for digital core) (2.5 V)
22	P4.0	A16	O	General purpose output port/Address bit
23	A8	R8	O	Address bit/SDRAM address bit
24	A7	R7/C7	O	Address bit/SDRAM address bit
25	A9	R9	O	Address bit/SDRAM address bit
26	A6	R6/C6	O	Address bit/SDRAM address bit
27	A5	R5/C5	O	Address bit/SDRAM address bit
28	A10	R10	O	Address bit/SDRAM address bit
29	A11	R11	O	Address bit/SDRAM address bit
30	A12	R12	O	Address bit/SDRAM address bit
31	VSS33-2	–	–	Digital ground for pads
32	VDD33-2	–	–	Digital power (for pads) (3.3 V)
33	A4	R4/C4	O	Address bit/SDRAM address bit
34	A3	R3/C3	O	Address bit/SDRAM address bit
35	A2	R2/C2	O	Address bit/SDRAM address bit
36	A1	R1/C1	O	Address bit/SDRAM address bit
37	A0	R0/C0	O	Address bit (All addresses are word addresses)/SDRAM Address bit
38	A13	R13	O	Address bit/SDRAM address bit
39	A14	$\overline{\text{RAS}}$	O	Address bit/Row address strobe for SDRAM access
40	A15	$\overline{\text{CAS}}$	O	Address bit/Column address strobe for SDRAM access
41	VSS33-3	–	–	Digital ground for pads
42	VDD33-3	–	–	Digital power (for pads) (3.3 V)
43	MEMCLK	–	O	Clock for SDRAM
44	$\overline{\text{CSSDRAM}}$	–	O	Chip select signal for SDRAM device
45	CLKEN	–	O	Enable for memory clock
46	$\overline{\text{CSROM}}$	–	O	Chip select signal for ROM device
47	$\overline{\text{RD}}$	–	O	External memory read strobe for ROM. $\overline{\text{RD}}$ is activated for every external instruction or data read access.
48	UDQM	–	O	Write disable for high byte
49	LDQM	–	O	Write disable for low byte
50	$\overline{\text{WR}}$	–	O	Memory write strobe

F

No.	Pin Name	Second Function	I/O	Pin Function
51	D15	–	I/O	Data bit
52	VSS33-4	–	–	Digital ground for pads
53	VDD33-4	–	–	Digital power (for pads) (3.3 V)
54	D7	–	I/O	Data bit
55	D0	–	I/O	Data bit
56	D14	–	I/O	Data bit
57	D8	–	I/O	Data bit
58	D6	–	I/O	Data bit
59	D1	–	I/O	Data bit
60	VSS33-5	–	–	Digital ground for pads
61	VDD33-5	–	–	Digital power (for pads) (3.3 V)
62	D13	–	I/O	Data bit
63	D9	–	I/O	Data bit
64	D5	–	I/O	Data bit
65	D2	–	I/O	Data bit
66	D12	–	I/O	Data bit
67	D10	–	I/O	Data bit
68	VSS33-6	–	–	Digital ground for pads
69	VDD33-6	–	–	Digital power (for pads) (3.3 V)
70	D4	–	I/O	Data bit
71	D3	–	I/O	Data bit
72	D11	–	I/O	Data bit
73	RSTIN	–	I	Reset input pin
74	P3.0	SCL0	I/O	General purpose I/O port/I2C Bus clock line 0
75	P3.1	SDA0	I/O	General purpose I/O port/I2C Bus data line 0
76	P3.2	CAPIN	I/O	General purpose I/O port/GPT2 register CAPREL
77	P3.3	T3OUT	I/O	General purpose I/O port/GPT1 timer T3 toggle
78	P3.4	T3EUD	I/O	General purpose I/O port/GPT1 timer T3 ext. up/down
79	P3.5	T4IN	I/O	General purpose I/O port/GPT1 timer T4 input for count/gate/reload/capture
80	P3.6	T3IN	I/O	General purpose I/O port/GPT1 timer T3 count/gate input
81	P3.7	T2IN	I/O	General purpose I/O port/GPT1 timer T2 input for count/gate/reload/capture
82	P3.8	MRST	I/O	General purpose I/O port/SSC masterreceiver/slave-transmit I/O
83	P3.9	MTSR	I/O	General purpose I/O port/SSC mastertransmit/slave-receiver O/I
84	VSS33-7	–	–	Digital ground for pads
85	VDD33-7	–	–	Digital power (for pads) (3.3 V)
86	VSS25-2	–	–	Digital ground (for digital core)
87	VDD25-2	–	–	Digital power (for digital core) (2.5 V)
88	P3.10	TxD0	I/O	General purpose I/O port/ASC0 clock/data output
89	P3.11	RxD0	I/O	General purpose I/O port/ASC0 data input (asynchronous) or I/O (synchronous).
90	P3.12	–	I/O	General purpose I/O port
91	P3.13	SCLK	I/O	General purpose I/O port/SSC master clock output/slave clock input
92	P3.15	–	I/O	General purpose I/O port
93	P5.14	T4EUD	I/O	General purpose Input port/GPT1 timer T4 ext.up/down ctrl. input
94	P5.15	T2EUD	I/O	General purpose Input port/GPT1 timer T2 ext.up/down ctrl. input
95	P6.0	TRIG_IN	I/O	General purpose I/O port/Trigger input-signal for 'On Chip Debug System' (OCDS)
96	P6.1	TRIG_OUT	I/O	General purpose I/O port/Trigger outputsignal for 'On Chip Debug System' (OCDS)
97	P6.2	FIELD	I/O	General purpose I/O port/Field signal of field detection
98	P6.3	SCL1	I/O	General purpose I/O port/I2C bus clock line 1
99	P6.4	SDA1	I/O	General purpose I/O port/I2C bus data line 1
100	P6.5	–	I/O	General purpose I/O port

A

No.	Pin Name	Second Function	I/O	Pin Function
101	P6.6	SDA2	I/O	General purpose I/O port/I2C bus data line 2
102	VSYN	VCS	I/O	Vertical sync In/output/Composite sync output
103	HSYN	–	I/O	Horizontal sync In/output
104	COR	RSTOUT	O	Output for contrast reduction/Reset output
105	BLANK	CORBLA	O	Fast blanking signal/Three-level signal for contrast reduction + fast blanking
106	VDD33-8	–	–	Digital power (for pads) (3.3 V)
107	VSS33-8	–	–	Digital ground for pads
108	XTAL1	–	I	Input of the oscillator amplifier circuit
109	XTAL2	–	O	Output of the oscillator amplifier circuit
110	VSSA-1	–	–	Analog ground
111	VDDA-1	–	–	Analog power (for PLL and DAC) (2.5 V)
112	R	–	O	Analog output for red channel
113	G	–	O	Analog output for green channel
114	B	–	O	Analog output for blue channel
115	VSSA-2	–	–	Analog ground
116	VDDA-2	–	–	Analog power (for ADCs) (2.5 V)
117	CVBS2	–	I	CVBS signal inputs for WSS data slicing
118	VSSA-3	–	–	Analog ground
119	VDDA-3	–	–	Analog power (for ADCs) (2.5 V)
120	CVBS1B	–	I	Ground for CVBS1A (differential input)
121	CVBS1A	–	I	CVBS signal inputs for full service data slicing
122	VSSA-4	–	–	Analog ground
123	VDDA-4	–	–	Analog power (for ADCs) (2.5 V)
124	P5.0	AN.0	I	General purpose Input port/Analog input for A/D-converter
125	P5.1	AN.1	I	General purpose Input port/Analog input for A/D-converter
126	P5.2	AN.2	I	General purpose Input port/Analog input for A/D-converter
127	P5.3	AN.3	I	General purpose Input port/Analog input for A/D-converter
128	TMODE	–	I	Test mode pin

D

7.4 CLEANING



Before shipping out the product, be sure to clean the following positions by using the prescribed cleaning tools:

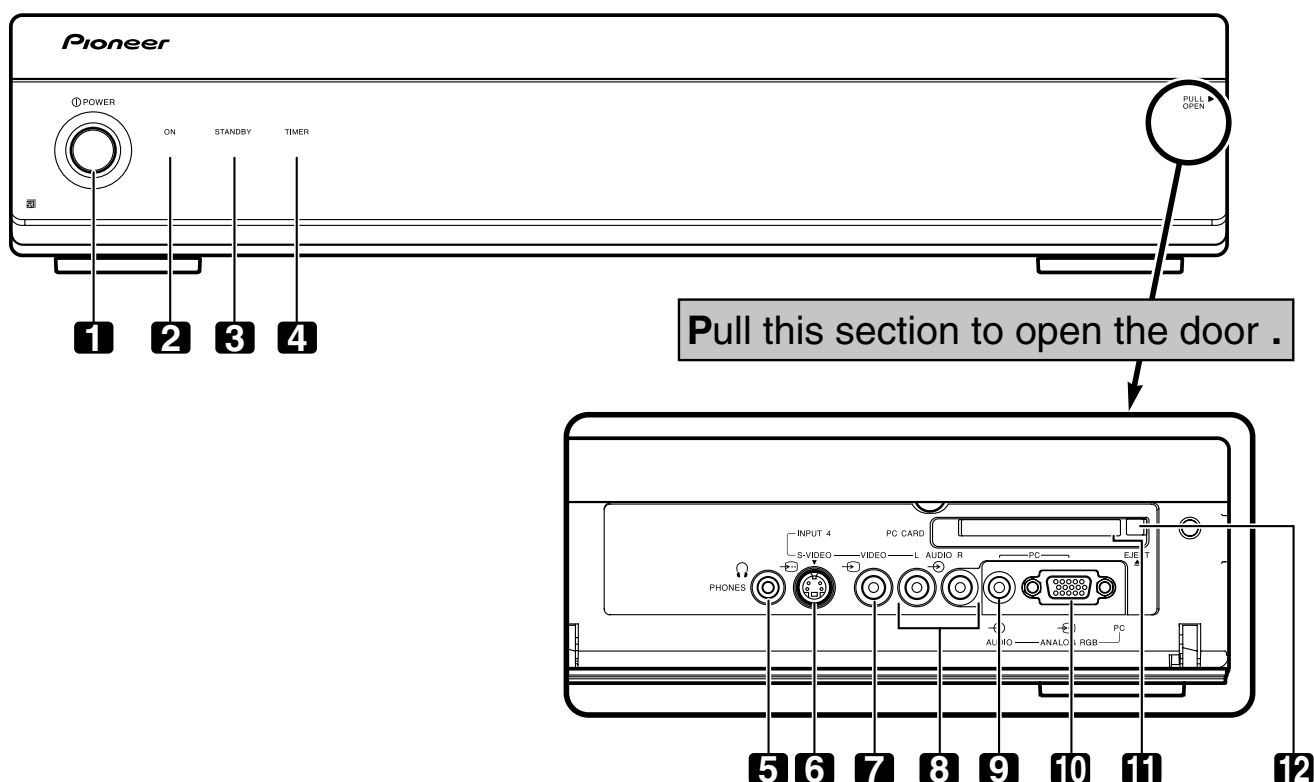
Position to be cleaned	Cleaning tools
Fans	Cleaning paper : GED-008

F

8. PANEL FACILITIES

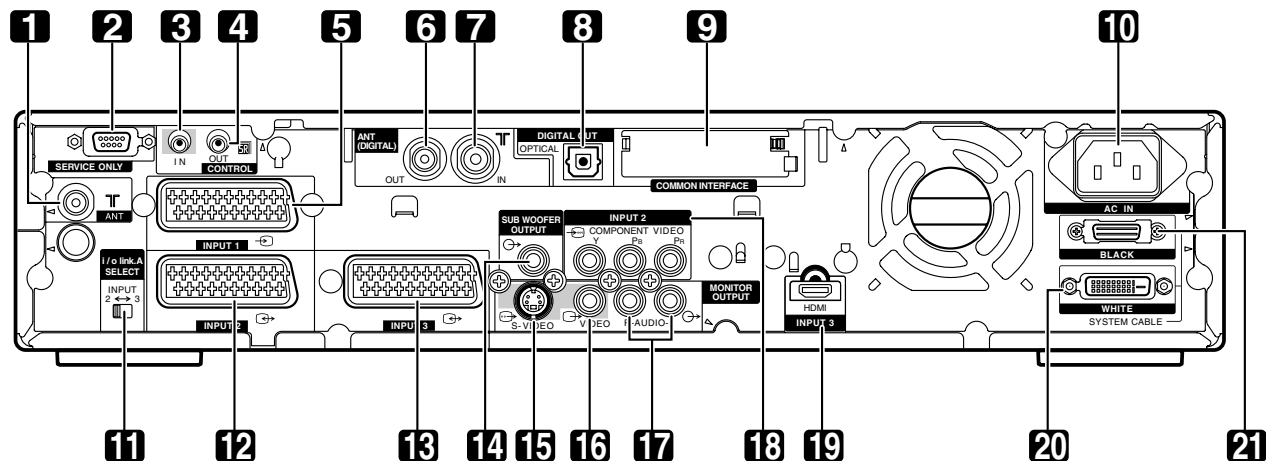
Media Receiver (PDP-505XDE/435XDE)

Front view



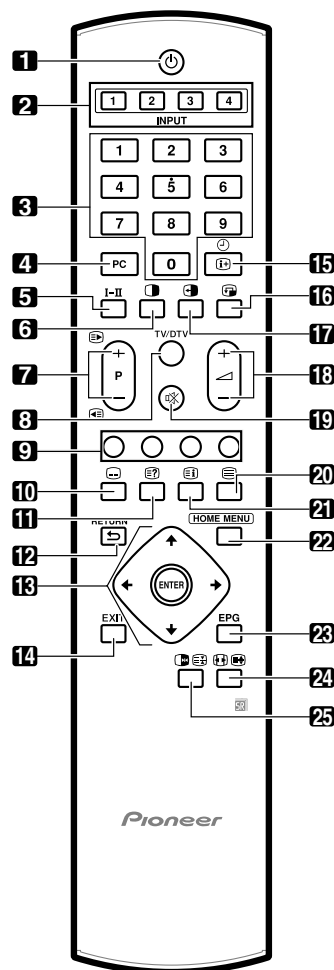
- 1 **POWER** button
- 2 **POWER ON** indicator
- 3 **STANDBY** indicator
- 4 **TIMER** indicator
PDP-505XDE/435XDE only
- 5 **PHONES** output terminal
PDP-505XDE/435XDE only
- 6 **INPUT 4** terminal (S-VIDEO)
- 7 **INPUT 4** terminal (VIDEO)
- 8 **INPUT 4** terminals (AUDIO)
- 9 **PC INPUT** terminal (AUDIO)
PDP-505XDE/435XDE only
- 10 **PC INPUT** terminal (ANALOG RGB)
PDP-505XDE/435XDE only
- 11 **PC CARD** slot
PDP-505XDE/435XDE only
- 12 **PC CARD EJECT** button
PDP-505XDE/435XDE only

Rear view



- | | |
|--|--|
| <p>1 ANT (Antenna) input terminal</p> <p>2 RS-232C terminal (used for factory setup)</p> <p>3 CONTROL IN terminal
PDP-505XDE/435XDE only</p> <p>4 CONTROL OUT terminal
PDP-505XDE/435XDE only</p> <p>5 INPUT 1 terminal (SCART)</p> <p>6 ANT OUT terminal (Antenna through out)
PDP-505XDE/435XDE only</p> <p>7 ANT IN terminal (Antenna in for DTV)
PDP-505XDE/435XDE only</p> <ul style="list-style-type: none"> • Power can be supplied through this terminal. <p>8 DIGITAL OUT terminal (OPTICAL)
PDP-505XDE/435XDE only</p> <p>9 COMMON INTERFACE slot
PDP-505XDE/435XDE only</p> <ul style="list-style-type: none"> • For a CA Module with a smart card | <p>10 AC IN terminal</p> <p>11 i/o link.A SELECT switch</p> <p>12 INPUT 2 terminal (SCART)</p> <p>13 INPUT 3 terminal (SCART)</p> <p>14 SUBWOOFER OUTPUT terminal
PDP-505XDE/435XDE only</p> <p>15 MONITOR OUTPUT terminal (S-VIDEO)</p> <p>16 MONITOR OUTPUT terminal (VIDEO)</p> <p>17 MONITOR OUTPUT terminals (AUDIO)</p> <p>18 INPUT 2 terminals
(COMPONENT VIDEO: Y, P_B, P_R)</p> <p>19 INPUT 3 terminal (HDMI)</p> <p>20 SYSTEM CABLE terminal (WHITE)</p> <p>21 SYSTEM CABLE terminal (BLACK)</p> |
|--|--|

Remote control unit (PDP-505XDE/435XDE)



- 1 Turns on the power to the Plasma Display or places into the standby mode.
- 2 **INPUT**
Selects an input source of the Plasma Display. (INPUT 1, INPUT 2, INPUT 3, INPUT 4)
- 3 **0 – 9**
TV/External input mode: Selects a channel.
TELETEXT mode: Selects a page.
- 4 **PC**
Selects the PC terminal as an input source.
- 5 **I–II**
Sets the sound multiplex mode.
- 6 Switches the screen mode among 2-screen, picture-in-picture, and single-screen.
- 7 **P+/P–**
TV/External input mode: Selects a channel.
 /
TELETEXT mode: Selects a page.
- 8 **TV/DTV (PDP-505XDE/435XDE only)**
Switches between the TV and DTV input mode.

9 **Colour (RED/GREEN/YELLOW/BLUE)**

TELETEXT mode: Selects a page.

- 10 TV/External input mode: Jumps to the teletext subtitle page.
DTV input mode: Turns subtitle on and off.
- 11 TELETEXT mode: Displays hidden characters.
- 12 **RETURN**
Restores the previous menu screen.
- 13 Selects a desired item on the setting screen.
ENTER
Executes a command.
- 14 **EXIT (PDP-505XDE/435XDE only)**
Returns to the normal screen in one step.
- 15 TV/External input mode: Displays the channel information.
DTV input mode: Displays the banner information.
- 16 Moves the location of the small screen when in the picture-in-picture mode.
- 17 Switches between the two screens when in the 2-screen or picture-in-picture mode.
- 18 Sets the volume.
- 19 Mutes the sound.
- 20 Selects the TELETEXT mode.
(all TV image, all TEXT image, TV/TEXT image)
- 21 TELETEXT mode: Displays an Index page for the CEEFAX/FLOF format. Displays a TOP Over View page for the TOP format.
- 22 **HOME MENU**
TV/External Input mode: Displays the Menu screen.
- 23 **EPG**
Display the Electronic Programme Guide.
- 24 TV/External input mode: Selects the screen size.
 TELETEXT mode: Switches Teletext images.
(full/upperhalf/lower half)
- 25 TV/External input mode: Freezes a frame from a moving image. Press again to cancel the function.
 TELETEXT mode: Stops updating Teletext pages.
Press again to release the hold mode.

NOTE

- When using the remote control unit, point it at the Plasma Display.